STIC Search Report
Biotech-Chem Library

STIC Database Tracking Number: 165519

TO: Nita M Minnifield
Location: REM-3C01/3C18
Art Unit: 1645
Tuesday, April 18, 2006
Case Serial Number: 09/818918

From: Toby Port
Location: Biotech-Chem Library
REM-1A59
Phone: (571)272-2523

toby.port@uspto.gov

Search Notes

Dear Examiner Minnifield,

See attached results.

If you have any questions about this search feel free to contact me at any time.

Thank you for using STIC search services!

Toby Port
Technical Information Specialist
STIC Biotech/Chem Library
(571)272-2523

Renewed
4/06
mm

185519

STIC-Biotech/ChemLib

From: Chan, Christina
Sent: Monday, April 17, 2006 8:46 AM
To: Minnifield, Nita; STIC-Biotech/ChemLib
Subject: RE: rush sequence search request

Please rush. Thanks Chris

Chris Chan
TC 1600 New Hire Training Coordinator and SPE 1644
(571)-272-0841
Remsen, 3E89

-----Original Message-----
From: Minnifield, Nita
Sent: Sunday, April 16, 2006 8:06 PM
To: Chan, Christina
Subject: rush sequence search request

Christina, please approve, 2 month amdt. due.

Thanks,

STIC

09/818918

Please do an interference sequence search on SEQ ID NO: 37-40 and 42-45 of this application.

Please provide a paper copy of all results.

Thanks,
Minnifield,

****
Searcher:_____
Searcher Phone:_____
Date Searcher Picked up:_____
Date completed:_____
Searcher Prep Time:_____
Online Time:_____

****
Type of Search
NA#_____ AA#:_____
S/L:_____ Oligomer:_____
Encode/Transl:_____
Structure #:_____Text:____
Inventor:_____ Litigation:___

****
Vendors and cost where applicable
STN:_____
DIALOG:_____
QUESTEL/ORBIT:_____
LEXIS/NEXIS:_____
SEQUENCE SYSTEM:_____
WWW/Internet:_____
Other (Specify):_____

OM nucleic - nucleic search, using sw model

Run on: April 17, 2006, 14:43:57 ; Search time 56.375 Seconds
(without alignments)
630.621 Million cell updates/sec

Title: US-09-818-918-37
Perfect score: 20
Sequence: 1 tccatgtcggtcctgatgct 20

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 1303057 seqs, 888780828 residues

Total number of hits satisfying chosen parameters: 2606114

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_NA:*
1: /cgn2_6/ptodata/1/ina/1_COMB.seq:*
2: /cgn2_6/ptodata/1/ina/5_COMB.seq:*
3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/1/ina/H_COMB.seq:*
6: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
7: /cgn2_6/ptodata/1/ina/PP_COMB.seq:*
8: /cgn2_6/ptodata/1/ina/RE_COMB.seq:*
9: /cgn2_6/ptodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.		Score	% Query Match	Length	DB	ID	Description
1		20	100.0	20	2	US-08-436-714-7	Sequence 7, Appli
2		20	100.0	20	2	US-08-442-705-7	Sequence 7, Appli
3		20	100.0	20	2	US-08-332-829-7	Sequence 7, Appli
4		20	100.0	20	3	US-08-386-063-21	Sequence 21, Appl
5		20	100.0	20	3	US-08-386-063-21	Sequence 21, Appl
6		20	100.0	20	3	US-08-738-652-31	Sequence 31, Appl
7		20	100.0	20	3	US-08-738-652-33	Sequence 33, Appl
8		20	100.0	20	3	US-08-738-652-34	Sequence 34, Appl
9		20	100.0	20	3	US-08-738-652-37	Sequence 37, Appl
10		20	100.0	20	3	US-09-286-098-22	Sequence 22, Appl
11		20	100.0	20	3	US-09-286-098-23	Sequence 23, Appl
12		20	100.0	20	3	US-09-286-098-42	Sequence 42, Appl
13		20	100.0	20	3	US-08-960-774-28	Sequence 28, Appl
14		20	100.0	20	3	US-09-325-193A-17	Sequence 17, Appl
15		20	100.0	20	3	US-09-325-193A-18	Sequence 18, Appl
16		20	100.0	20	3	US-09-325-193A-35	Sequence 35, Appl
17		20	100.0	20	3	US-09-191-170-20	Sequence 20, Appl
18		20	100.0	20	3	US-09-191-170-22	Sequence 22, Appl
19		20	100.0	20	3	US-09-191-170-23	Sequence 23, Appl
20		20	100.0	20	3	US-09-337-619-28	Sequence 28, Appl
21		20	100.0	20	3	US-09-954-987B-93	Sequence 93, Appl
22		20	100.0	20	3	US-09-672-126B-92	Sequence 92, Appl
c 23		20	100.0	25	3	US-09-396-196G-52295	Sequence 52295, A
c 24		20	100.0	25	3	US-09-396-196G-52296	Sequence 52296, A
c 25		20	100.0	1237	2	US-08-798-000-2	Sequence 2, Appli
c 26		20	100.0	2002	3	US-09-315-127-7	Sequence 7, Appli
c 27		20	100.0	3925	3	US-09-011-745-9	Sequence 9, Appli
28		20	100.0	8202	2	US-08-258-420-13	Sequence 13, Appl
29		19	95.0	19	3	US-09-286-098-20	Sequence 20, Appl
30		19	95.0	20	3	US-08-386-063-23	Sequence 23, Appl
31		19	95.0	20	3	US-08-386-063-24	Sequence 24, Appl
32		19	95.0	20	3	US-08-386-063-23	Sequence 23, Appl
33		19	95.0	20	3	US-08-386-063-24	Sequence 24, Appl
34		19	95.0	20	3	US-08-960-774-30	Sequence 30, Appl
35		19	95.0	20	3	US-08-960-774-31	Sequence 31, Appl
36		19	95.0	20	3	US-09-337-619-30	Sequence 30, Appl
37		19	95.0	20	3	US-09-337-619-31	Sequence 31, Appl
38		18.4	92.0	20	3	US-08-738-652-38	Sequence 38, Appl
39		18.4	92.0	20	3	US-08-738-652-39	Sequence 39, Appl
40		18.4	92.0	20	3	US-08-738-652-40	Sequence 40, Appl
41		18.4	92.0	20	3	US-08-738-652-41	Sequence 41, Appl
42		18.4	92.0	20	3	US-08-738-652-42	Sequence 42, Appl
43		18.4	92.0	20	3	US-08-738-652-43	Sequence 43, Appl
44		18.4	92.0	20	3	US-08-738-652-53	Sequence 53, Appl
45		18.4	92.0	20	3	US-09-030-701-4	Sequence 4, Appli

ALIGNMENTS

```
RESULT 1
US-08-436-714-7
; Sequence 7, Application US/08436714
; Patent No. 5602244
;  GENERAL INFORMATION:
;    APPLICANT:  Marvin H. Caruthers et al
;    TITLE OF INVENTION:  Nucleoside and Polynucleotide
;    TITLE OF INVENTION:  Thiophosphoramidite and Phosphorodithioate Compounds and Proce
;    NUMBER OF SEQUENCES:  8
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Yahwak & Associates
;      STREET:  25 Skytop Drive
;      CITY:  Trumbull
;      STATE:  Connecticut
;      COUNTRY:  USA
;      ZIP:  06611
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  floppy disk
;      COMPUTER:  Macintosh
;      OPERATING SYSTEM:  MS-DOS
;      SOFTWARE:  Microsoft Word 4.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/436,714
;      FILING DATE:
;      CLASSIFICATION:  536
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  George M. Yahwak
;      REGISTRATION NUMBER:  26,824
;      REFERENCE/DOCKET NUMBER:  CU 311 BIGCIP
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (203)268-1951
;      TELEFAX:  (203)268-1951
;  INFORMATION FOR SEQ ID NO:  7:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-436-714-7

  Query Match             100.0%;  Score 20;  DB 2;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.4;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
```

```
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 2
US-08-442-705-7
; Sequence 7, Application US/08442705
; Patent No. 5684148
;  GENERAL INFORMATION:
;    APPLICANT:  Marvin H. Caruthers et al
;    TITLE OF INVENTION:  Nucleoside and Polynucleotide
;    TITLE OF INVENTION:  Thiophosphoramidite and Phosphorodithioate Compounds and Proce
;    NUMBER OF SEQUENCES:  8
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Yahwak & Associates
;      STREET:  25 Skytop Drive
;      CITY:  Trumbull
;      STATE:  Connecticut
;      COUNTRY:  USA
;      ZIP:  06611
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  floppy disk
;      COMPUTER:  Macintosh
;      OPERATING SYSTEM:  MS-DOS
;      SOFTWARE:  Microsoft Word 4.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/442,705
;      FILING DATE:
;      CLASSIFICATION:  536
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  George M. Yahwak
;      REGISTRATION NUMBER:  26,824
;      REFERENCE/DOCKET NUMBER:  CU 311 BIGCIP
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (203)268-1951
;      TELEFAX:  (203)268-1951
;  INFORMATION FOR SEQ ID NO:  7:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-442-705-7

  Query Match             100.0%;  Score 20;  DB 2;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.4;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 3
US-08-332-829-7
; Sequence 7, Application US/08332829
; Patent No. 5750666
;  GENERAL INFORMATION:
;    APPLICANT:  Marvin H. Caruthers et al
;    TITLE OF INVENTION:  Nucleoside and Polynucleotide
;    TITLE OF INVENTION:  Thiophosphoramidite and Phosphorodithioate Compounds and Proce
;    NUMBER OF SEQUENCES:  8
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Yahwak & Associates
;      STREET:  25 Skytop Drive
;      CITY:  Trumbull
;      STATE:  Connecticut
;      COUNTRY:  USA
;      ZIP:  06611
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  floppy disk
;      COMPUTER:  Macintosh
;      OPERATING SYSTEM:  MS-DOS
;      SOFTWARE:  Microsoft Word 4.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/332,829
;      FILING DATE:
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  George M. Yahwak
;      REGISTRATION NUMBER:  26,824
;      REFERENCE/DOCKET NUMBER:  CU 311 BIGCIP
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (203)268-1951
;      TELEFAX:  (203)268-1951
;  INFORMATION FOR SEQ ID NO:  7:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-332-829-7

  Query Match             100.0%;  Score 20;  DB 2;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.4;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 4
US-08-386-063-21
; Sequence 21, Application US/08386063
; Patent No. 6008200
;  GENERAL INFORMATION:
;    APPLICANT:  Arthur M. Krieg, M.D.
;    TITLE OF INVENTION:  IMMUNOMODULATORY OLIGONUCLEOTIDES
;    NUMBER OF SEQUENCES:  27
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  LAHIVE & COCKFIELD
;      STREET:  60 STATE STREET, SUITE 510
;      CITY:  BOSTON
;      STATE:  MASSACHUSETTS
;      COUNTRY:  USA
;      ZIP:  02109-1875
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  ASCII text
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/386,063
;      FILING DATE:
;      CLASSIFICATION:  424
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  ARNOLD, BETH E.
;      REGISTRATION NUMBER:  35,430
;      REFERENCE/DOCKET NUMBER:  UIZ-013CP
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (617)227-7400
;      TELEFAX:  (617)227-5941
;  INFORMATION FOR SEQ ID NO:  21:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-386-063-21

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.4;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;
```

```
Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20
```

```
RESULT 5
US-08-386-063-21
; Sequence 21, Application US/08386063
; Patent No. 6194388
;  GENERAL INFORMATION:
;    APPLICANT:  Arthur M. Krieg, M.D.
;    TITLE OF INVENTION:  IMMUNOMODULATORY OLIGONUCLEOTIDES
;    NUMBER OF SEQUENCES:  27
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  LAHIVE & COCKFIELD
;      STREET:  60 STATE STREET, SUITE 510
;      CITY:  BOSTON
;      STATE:  MASSACHUSETTS
;      COUNTRY:  USA
;      ZIP:  02109-1875
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  ASCII text
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/386,063
;      FILING DATE:
;      CLASSIFICATION:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  ARNOLD, BETH E.
;      REGISTRATION NUMBER:  35,430
;      REFERENCE/DOCKET NUMBER:  UIZ-013CP
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (617)227-7400
;      TELEFAX:  (617)227-5941
;  INFORMATION FOR SEQ ID NO:  21:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-386-063-21

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.4;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 6
US-08-738-652-31
; Sequence 31, Application US/08738652B
; Patent No. 6207646
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7004 HCL
;  CURRENT APPLICATION NUMBER: US/08/738,652B
;  CURRENT FILING DATE: 1996-10-30
;  EARLIER APPLICATION NUMBER: US 08/276,358
;  EARLIER FILING DATE: 1994-07-15
;  EARLIER APPLICATION NUMBER: US 08/386,063
;  EARLIER FILING DATE: 1995-02-07
;  NUMBER OF SEQ ID NOS: 55
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 31
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-08-738-652-31

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.4;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 7
US-08-738-652-33
; Sequence 33, Application US/08738652B
; Patent No. 6207646
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7004 HCL
;  CURRENT APPLICATION NUMBER: US/08/738,652B
;  CURRENT FILING DATE: 1996-10-30
;  EARLIER APPLICATION NUMBER: US 08/276,358
;  EARLIER FILING DATE: 1994-07-15
;  EARLIER APPLICATION NUMBER: US 08/386,063
;  EARLIER FILING DATE: 1995-02-07
;  NUMBER OF SEQ ID NOS: 55
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 33
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
;   FEATURE:
;   NAME/KEY: modified_base
;   LOCATION: (8)...(8)
;   OTHER INFORMATION: m5c
US-08-738-652-33

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.4;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 8
US-08-738-652-34
; Sequence 34, Application US/08738652B
; Patent No. 6207646
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7004 HCL
;  CURRENT APPLICATION NUMBER: US/08/738,652B
;  CURRENT FILING DATE: 1996-10-30
;  EARLIER APPLICATION NUMBER: US 08/276,358
;  EARLIER FILING DATE: 1994-07-15
;  EARLIER APPLICATION NUMBER: US 08/386,063
;  EARLIER FILING DATE: 1995-02-07
;  NUMBER OF SEQ ID NOS: 55
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 34
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
```

```
;   OTHER INFORMATION: Synthetic oligonucleotide
;   FEATURE:
;   NAME/KEY: modified_base
;   LOCATION: (12)...(12)
;   OTHER INFORMATION: m5c
US-08-738-652-34

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.4;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 9
US-08-738-652-37
; Sequence 37, Application US/08738652B
; Patent No. 6207646
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7004 HCL
;  CURRENT APPLICATION NUMBER: US/08/738,652B
;  CURRENT FILING DATE: 1996-10-30
;  EARLIER APPLICATION NUMBER: US 08/276,358
;  EARLIER FILING DATE: 1994-07-15
;  EARLIER APPLICATION NUMBER: US 08/386,063
;  EARLIER FILING DATE: 1995-02-07
;  NUMBER OF SEQ ID NOS: 55
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 37
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-08-738-652-37

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.4;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 10
US-09-286-098-22
; Sequence 22, Application US/09286098
; Patent No. 6218371
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT: Weiner, George
;  TITLE OF INVENTION: Methods and Products for Stimulating the
;  TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
;  TITLE OF INVENTION: Cytokines
;  FILE REFERENCE: C1039/7026/HCL
;  CURRENT APPLICATION NUMBER: US/09/286,098
;  CURRENT FILING DATE: 1999-04-02
;  EARLIER APPLICATION NUMBER: US 60/080,729
;  EARLIER FILING DATE: 1998-04-03
;  NUMBER OF SEQ ID NOS: 105
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 22
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Sequence
;   FEATURE:
;   NAME/KEY: modified_base
;   LOCATION: (8)...(8)
;   OTHER INFORMATION: m5c
US-09-286-098-22

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.4;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 11
US-09-286-098-23
; Sequence 23, Application US/09286098
; Patent No. 6218371
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT: Weiner, George
;  TITLE OF INVENTION: Methods and Products for Stimulating the
;  TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
;  TITLE OF INVENTION: Cytokines
;  FILE REFERENCE: C1039/7026/HCL
;  CURRENT APPLICATION NUMBER: US/09/286,098
;  CURRENT FILING DATE: 1999-04-02
;  EARLIER APPLICATION NUMBER: US 60/080,729
;  EARLIER FILING DATE: 1998-04-03
;  NUMBER OF SEQ ID NOS: 105
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 23
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Sequence
;   FEATURE:
;   NAME/KEY: modified_base
;   LOCATION: (12)...(12)
;   OTHER INFORMATION: m5c
US-09-286-098-23

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.4;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 12
US-09-286-098-42
; Sequence 42, Application US/09286098
; Patent No. 6218371
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT: Weiner, George
;  TITLE OF INVENTION: Methods and Products for Stimulating the
;  TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
;  TITLE OF INVENTION: Cytokines
;  FILE REFERENCE: C1039/7026/HCL
;  CURRENT APPLICATION NUMBER: US/09/286,098
;  CURRENT FILING DATE: 1999-04-02
;  EARLIER APPLICATION NUMBER: US 60/080,729
;  EARLIER FILING DATE: 1998-04-03
;  NUMBER OF SEQ ID NOS: 105
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 42
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
```

```
;   FEATURE:
;   OTHER INFORMATION: Synthetic Sequence
US-09-286-098-42

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.4;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 13
US-08-960-774-28
; Sequence 28, Application US/08960774
; Patent No. 6239116
;  GENERAL INFORMATION:
;    APPLICANT:  Krieg et al.,
;    TITLE OF INVENTION:  IMMUNOSTIMULATORY NUCLEIC ACID MOLECULES
;    NUMBER OF SEQUENCES:  111
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Fish & Richardson P.C.
;      STREET:  4225 Executive Square, Suite 1400
;      CITY:  La Jolla
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  92037
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  ASCII text
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/960,774
;      FILING DATE:  30-October-1997
;      CLASSIFICATION:  514
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  U.S. Serial No. 6239116  08/738,652
;      FILING DATE:  October 30, 1996
;      CLASSIFICATION:  514
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Haile, Lisa A.
;      REGISTRATION NUMBER:  38,347
;      REFERENCE/DOCKET NUMBER:  08918/012001
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  619/678-5070
;      TELEFAX:  619/678-5099
;  INFORMATION FOR SEQ ID NO:  28:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-960-774-28

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.4;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 14
US-09-325-193A-17
; Sequence 17, Application US/09325193A
; Patent No. 6406705
; GENERAL INFORMATION:
;  APPLICANT:  Davis, Heather L.
;  APPLICANT:  Schorr, Joachim
;  APPLICANT:  Krieg, Arthur M.
;  TITLE OF INVENTION:  Use of Nucleic Acids Containing
;  TITLE OF INVENTION:  Unmethylated CpG Dinucleotide as an Adjuvant
;  FILE REFERENCE:  C1039/7025/HCL
;  CURRENT APPLICATION NUMBER: US/09/325,193A
;  CURRENT FILING DATE:  1999-06-03
;  PRIOR APPLICATION NUMBER:  US 09/154,614
;  PRIOR FILING DATE:  1998-09-16
;  PRIOR APPLICATION NUMBER:  PCT/US98/04703
;  PRIOR FILING DATE:  1998-03-10
;  PRIOR APPLICATION NUMBER:  US 60/040,376
;  PRIOR FILING DATE:  1997-03-10
;  NUMBER OF SEQ ID NOS:  98
;  SOFTWARE:  FastSEQ for Windows Version 3.0
; SEQ ID NO 17
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Oligonucleotide
US-09-325-193A-17

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.4;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 15
US-09-325-193A-18
; Sequence 18, Application US/09325193A
; Patent No. 6406705
; GENERAL INFORMATION:
;  APPLICANT:  Davis, Heather L.
;  APPLICANT:  Schorr, Joachim
;  APPLICANT:  Krieg, Arthur M.
;  TITLE OF INVENTION:  Use of Nucleic Acids Containing
;  TITLE OF INVENTION:  Unmethylated CpG Dinucleotide as an Adjuvant
;  FILE REFERENCE:  C1039/7025/HCL
;  CURRENT APPLICATION NUMBER: US/09/325,193A
;  CURRENT FILING DATE:  1999-06-03
;  PRIOR APPLICATION NUMBER:  US 09/154,614
;  PRIOR FILING DATE:  1998-09-16
;  PRIOR APPLICATION NUMBER:  PCT/US98/04703
;  PRIOR FILING DATE:  1998-03-10
;  PRIOR APPLICATION NUMBER:  US 60/040,376
;  PRIOR FILING DATE:  1997-03-10
;  NUMBER OF SEQ ID NOS:  98
;  SOFTWARE:  FastSEQ for Windows Version 3.0
; SEQ ID NO 18
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   NAME/KEY: modified_base
;   LOCATION: (12)...(12)
;   OTHER INFORMATION: m5c
;   OTHER INFORMATION: Synthetic Oligonucleotide
US-09-325-193A-18

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.4;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


Search completed: April 17, 2006, 18:04:52
```

Job time : 56.375 secs

GenCore version 5.1.7

OM nucleic - nucleic search, using sw model

Run on: April 17, 2006, 17:32:13 ; Search time 366.375 Seconds
(without alignments)
451.416 Million cell updates/sec

Title: US-09-818-918-37
Perfect score: 20
Sequence: 1 tccatgtcggtcctgatgct 20

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 9793542 seqs, 4134689005 residues

Total number of hits satisfying chosen parameters: 19587084

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_NA_Main:*
1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
2: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
3: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*
4: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:*
5: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
6: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
7: /cgn2_6/ptodata/1/pubpna/US10C_PUBCOMB.seq:*
8: /cgn2_6/ptodata/1/pubpna/US10D_PUBCOMB.seq:*
9: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq:*
10: /cgn2_6/ptodata/1/pubpna/US11_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
	1	20	100.0	20	3	US-09-466-320-24	Sequence 24, Appl
	2	20	100.0	20	3	US-09-824-468-22	Sequence 22, Appl
	3	20	100.0	20	3	US-09-824-468-23	Sequence 23, Appl
	4	20	100.0	20	3	US-09-824-468-42	Sequence 42, Appl
	5	20	100.0	20	3	US-09-800-266A-17	Sequence 17, Appl
	6	20	100.0	20	3	US-09-800-266A-18	Sequence 18, Appl
	7	20	100.0	20	3	US-09-800-266A-35	Sequence 35, Appl
	8	20	100.0	20	3	US-09-895-007A-17	Sequence 17, Appl
	9	20	100.0	20	3	US-09-895-007A-18	Sequence 18, Appl
	10	20	100.0	20	3	US-09-895-007A-35	Sequence 35, Appl
	11	20	100.0	20	3	US-09-920-313-17	Sequence 17, Appl
	12	20	100.0	20	3	US-09-920-313-18	Sequence 18, Appl
	13	20	100.0	20	3	US-09-920-313-35	Sequence 35, Appl
	14	20	100.0	20	3	US-09-415-142-21	Sequence 21, Appl
c	15	20	100.0	20	3	US-09-888-326-63	Sequence 63, Appl
	16	20	100.0	20	3	US-09-888-326-603	Sequence 603, App
	17	20	100.0	20	3	US-09-888-326-604	Sequence 604, App
	18	20	100.0	20	3	US-09-818-918-31	Sequence 31, Appl
	19	20	100.0	20	3	US-09-818-918-33	Sequence 33, Appl
	20	20	100.0	20	3	US-09-818-918-34	Sequence 34, Appl
	21	20	100.0	20	3	US-09-818-918-37	Sequence 37, Appl
	22	20	100.0	20	3	US-09-931-583-21	Sequence 21, Appl
	23	20	100.0	20	3	US-09-931-583-54	Sequence 54, Appl
	24	20	100.0	20	3	US-09-776-479-389	Sequence 389, App
c	25	20	100.0	20	3	US-09-776-479-395	Sequence 395, App
	26	20	100.0	20	3	US-09-776-479-463	Sequence 463, App
c	27	20	100.0	20	3	US-09-776-479-466	Sequence 466, App
	28	20	100.0	20	3	US-09-776-479-573	Sequence 573, App
	29	20	100.0	20	3	US-09-954-987B-93	Sequence 93, Appl
	30	20	100.0	20	3	US-09-874-991C-35	Sequence 35, Appl
	31	20	100.0	20	3	US-09-874-991C-101	Sequence 101, App
	32	20	100.0	20	3	US-09-874-991C-124	Sequence 124, App
	33	20	100.0	20	3	US-09-874-991C-152	Sequence 152, App
	34	20	100.0	20	3	US-09-874-991C-173	Sequence 173, App
	35	20	100.0	20	3	US-09-874-991C-198	Sequence 198, App
	36	20	100.0	20	3	US-09-874-991C-414	Sequence 414, App
	37	20	100.0	20	3	US-09-874-991C-433	Sequence 433, App
	38	20	100.0	20	3	US-09-776-479-389	Sequence 389, App
c	39	20	100.0	20	3	US-09-776-479-395	Sequence 395, App
	40	20	100.0	20	3	US-09-776-479-463	Sequence 463, App
c	41	20	100.0	20	3	US-09-776-479-466	Sequence 466, App
	42	20	100.0	20	3	US-09-776-479-573	Sequence 573, App
	43	20	100.0	20	5	US-10-023-909A-17	Sequence 17, Appl
	44	20	100.0	20	5	US-10-023-909A-18	Sequence 18, Appl
	45	20	100.0	20	5	US-10-023-909A-35	Sequence 35, Appl

ALIGNMENTS

RESULT 1
US-09-466-320-24
; Sequence 24, Application US/09466320
; Patent No. US20020025939A1
; GENERAL INFORMATION:
; APPLICANT: Iversen, Patrick
; TITLE OF INVENTION: Chorionic Gonadotropin DNA Vaccines and
; TITLE OF INVENTION: Methods
; FILE REFERENCE: 0450-0026.30
; CURRENT APPLICATION NUMBER: US/09/466,320
; CURRENT FILING DATE: 1999-12-17
; EARLIER APPLICATION NUMBER: US 60/112,910
; EARLIER FILING DATE: 1998-12-18
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 24
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: vector sequence
US-09-466-320-24

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.5;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGGTCCTGATGCT 20

RESULT 2
US-09-824-468-22
; Sequence 22, Application US/09824468
; Patent No. US20020064515A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Weiner, George
; TITLE OF INVENTION: Methods and Products for Stimulating the
; TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
; TITLE OF INVENTION: Cytokines
; FILE REFERENCE: C1039/7026/HCL
; CURRENT APPLICATION NUMBER: US/09/824,468
; CURRENT FILING DATE: 2001-04-02
; PRIOR APPLICATION NUMBER: 09/286,098

```
;  PRIOR FILING DATE: 1999-04-02
;  NUMBER OF SEQ ID NOS: 105
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 22
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Sequence
;   NAME/KEY: modified_base
;   LOCATION: (8)...(8)
;   OTHER INFORMATION: m5c
US-09-824-468-22

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 5.5;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 3
US-09-824-468-23
; Sequence 23, Application US/09824468
; Patent No. US20020064515A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Weiner, George
;  TITLE OF INVENTION: Methods and Products for Stimulating the
;  TITLE OF INVENTION:  Immune System Using Immunotherapeutic Oligonucleotides and
;  TITLE OF INVENTION:  Cytokines
;  FILE REFERENCE: C1039/7026/HCL
;  CURRENT APPLICATION NUMBER: US/09/824,468
;  CURRENT FILING DATE:  2001-04-02
;  PRIOR APPLICATION NUMBER: 09/286,098
;  PRIOR FILING DATE: 1999-04-02
;  NUMBER OF SEQ ID NOS: 105
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 23
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Sequence
;   NAME/KEY: modified_base
;   LOCATION: (12)...(12)
;   OTHER INFORMATION: m5c
US-09-824-468-23

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 5.5;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 4
US-09-824-468-42
; Sequence 42, Application US/09824468
; Patent No. US20020064515A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Weiner, George
;  TITLE OF INVENTION: Methods and Products for Stimulating the
;  TITLE OF INVENTION:  Immune System Using Immunotherapeutic Oligonucleotides and
;  TITLE OF INVENTION:  Cytokines
;  FILE REFERENCE: C1039/7026/HCL
;  CURRENT APPLICATION NUMBER: US/09/824,468
;  CURRENT FILING DATE:  2001-04-02
;  PRIOR APPLICATION NUMBER: 09/286,098
;  PRIOR FILING DATE: 1999-04-02
;  NUMBER OF SEQ ID NOS: 105
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 42
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Sequence
US-09-824-468-42

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 5.5;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 5
US-09-800-266A-17
; Sequence 17, Application US/09800266A
; Patent No. US20020156033A1
; GENERAL INFORMATION:
;  APPLICANT: Bratzler, Robert L.
;  APPLICANT:  Petersen, Deanna M.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acids and
;  TITLE OF INVENTION:  Cancer Medicament Combination Therapy for the Treatment of
;  TITLE OF INVENTION:  Cancer
;  FILE REFERENCE: C1037/7017(HCL/MAT)
;  CURRENT APPLICATION NUMBER: US/09/800,266A
;  CURRENT FILING DATE:  2001-03-05
;  PRIOR APPLICATION NUMBER: US 60/187,214
;  PRIOR FILING DATE: 2000-03-03
;  NUMBER OF SEQ ID NOS: 146
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 17
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Sequence
US-09-800-266A-17

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 5.5;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 6
US-09-800-266A-18
; Sequence 18, Application US/09800266A
; Patent No. US20020156033A1
; GENERAL INFORMATION:
;  APPLICANT: Bratzler, Robert L.
;  APPLICANT:  Petersen, Deanna M.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acids and
;  TITLE OF INVENTION:  Cancer Medicament Combination Therapy for the Treatment of
;  TITLE OF INVENTION:  Cancer
;  FILE REFERENCE: C1037/7017(HCL/MAT)
;  CURRENT APPLICATION NUMBER: US/09/800,266A
;  CURRENT FILING DATE:  2001-03-05
;  PRIOR APPLICATION NUMBER: US 60/187,214
;  PRIOR FILING DATE: 2000-03-03
;  NUMBER OF SEQ ID NOS: 146
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 18
```

```
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Sequence
US-09-800-266A-18

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 5.5;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 7
US-09-800-266A-35
; Sequence 35, Application US/09800266A
; Patent No. US20020156033A1
; GENERAL INFORMATION:
;  APPLICANT: Bratzler, Robert L.
;  APPLICANT:  Petersen, Deanna M.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acids and
;  TITLE OF INVENTION:  Cancer Medicament Combination Therapy for the Treatment of
;  TITLE OF INVENTION:  Cancer
;  FILE REFERENCE: C1037/7017(HCL/MAT)
;  CURRENT APPLICATION NUMBER: US/09/800,266A
;  CURRENT FILING DATE:  2001-03-05
;  PRIOR APPLICATION NUMBER: US 60/187,214
;  PRIOR FILING DATE: 2000-03-03
;  NUMBER OF SEQ ID NOS: 146
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 35
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Sequence
US-09-800-266A-35

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 5.5;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 8
US-09-895-007A-17
; Sequence 17, Application US/09895007A
; Patent No. US20020165178A1
; GENERAL INFORMATION:
;  APPLICANT: Schetter, Christian
;  APPLICANT:  Bratzler, Robert L.
;  APPLICANT:  Petersen, Deanna M.
;  TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACIDS FOR THE
;  TITLE OF INVENTION:  TREATMENT OF ANEMIA, THROMBOCYTOPENIA, AND NEUTROPENIA
;  FILE REFERENCE: C1041/7014 (AWS)
;  CURRENT APPLICATION NUMBER: US/09/895,007A
;  CURRENT FILING DATE:  2001-06-28
;  PRIOR APPLICATION NUMBER: US 60/214,368
;  PRIOR FILING DATE: 2000-06-28
;  NUMBER OF SEQ ID NOS: 133
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 17
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-09-895-007A-17

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 5.5;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 9
US-09-895-007A-18
; Sequence 18, Application US/09895007A
; Patent No. US20020165178A1
; GENERAL INFORMATION:
;  APPLICANT: Schetter, Christian
;  APPLICANT:  Bratzler, Robert L.
;  APPLICANT:  Petersen, Deanna M.
;  TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACIDS FOR THE
;  TITLE OF INVENTION:  TREATMENT OF ANEMIA, THROMBOCYTOPENIA, AND NEUTROPENIA
;  FILE REFERENCE: C1041/7014 (AWS)
;  CURRENT APPLICATION NUMBER: US/09/895,007A
;  CURRENT FILING DATE:  2001-06-28
;  PRIOR APPLICATION NUMBER: US 60/214,368
;  PRIOR FILING DATE: 2000-06-28
;  NUMBER OF SEQ ID NOS: 133
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 18
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-09-895-007A-18

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 5.5;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 10
US-09-895-007A-35
; Sequence 35, Application US/09895007A
; Patent No. US20020165178A1
; GENERAL INFORMATION:
;  APPLICANT: Schetter, Christian
;  APPLICANT:  Bratzler, Robert L.
;  APPLICANT:  Petersen, Deanna M.
;  TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACIDS FOR THE
;  TITLE OF INVENTION:  TREATMENT OF ANEMIA, THROMBOCYTOPENIA, AND NEUTROPENIA
;  FILE REFERENCE: C1041/7014 (AWS)
;  CURRENT APPLICATION NUMBER: US/09/895,007A
;  CURRENT FILING DATE:  2001-06-28
;  PRIOR APPLICATION NUMBER: US 60/214,368
;  PRIOR FILING DATE: 2000-06-28
;  NUMBER OF SEQ ID NOS: 133
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 35
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-09-895-007A-35

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 5.5;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;
```

```
Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 11
US-09-920-313-17
; Sequence 17, Application US/09920313
; Publication No. US20020198165A1
; GENERAL INFORMATION:
;  APPLICANT: Bratzler, Robert L.
;  APPLICANT:  Petersen, Deanna M.
;  TITLE OF INVENTION: Nucleic Acids for the Prevention and
;  TITLE OF INVENTION:  Treatment of Gastric Ulcers
;  FILE REFERENCE: C1037/7019 (HCL/MAT)
;  CURRENT APPLICATION NUMBER: US/09/920,313
;  CURRENT FILING DATE:  2001-08-01
;  PRIOR APPLICATION NUMBER: US 60/222,248
;  PRIOR FILING DATE: 2001-08-08
;  NUMBER OF SEQ ID NOS: 148
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 17
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Sequence
US-09-920-313-17

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 5.5;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 12
US-09-920-313-18
; Sequence 18, Application US/09920313
; Publication No. US20020198165A1
; GENERAL INFORMATION:
;  APPLICANT: Bratzler, Robert L.
;  APPLICANT:  Petersen, Deanna M.
;  TITLE OF INVENTION: Nucleic Acids for the Prevention and
;  TITLE OF INVENTION:  Treatment of Gastric Ulcers
;  FILE REFERENCE: C1037/7019 (HCL/MAT)
;  CURRENT APPLICATION NUMBER: US/09/920,313
;  CURRENT FILING DATE:  2001-08-01
;  PRIOR APPLICATION NUMBER: US 60/222,248
;  PRIOR FILING DATE: 2001-08-08
;  NUMBER OF SEQ ID NOS: 148
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 18
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Sequence
US-09-920-313-18

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 5.5;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 13
```

```
US-09-920-313-35
; Sequence 35, Application US/09920313
; Publication No. US20020198165A1
; GENERAL INFORMATION:
;  APPLICANT: Bratzler, Robert L.
;  APPLICANT:  Petersen, Deanna M.
;  TITLE OF INVENTION: Nucleic Acids for the Prevention and
;  TITLE OF INVENTION:  Treatment of Gastric Ulcers
;  FILE REFERENCE: C1037/7019 (HCL/MAT)
;  CURRENT APPLICATION NUMBER: US/09/920,313
;  CURRENT FILING DATE:  2001-08-01
;  PRIOR APPLICATION NUMBER: US 60/222,248
;  PRIOR FILING DATE: 2001-08-08
;  NUMBER OF SEQ ID NOS: 148
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 35
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Sequence
US-09-920-313-35

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 5.5;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 14
US-09-415-142-21
; Sequence 21, Application US/09415142
; Publication No. US20030026782A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: IMMUNOMODULATORY OLIGONUCLEOTIDES
;  FILE REFERENCE: C1039/7029
;  CURRENT APPLICATION NUMBER: US/09/415,142
;  CURRENT FILING DATE:  1999-10-09
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  NUMBER OF SEQ ID NOS: 27
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 21
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-09-415-142-21

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 5.5;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 15
US-09-888-326-63/c
; Sequence 63, Application US/09888326
; Publication No. US20030026801A1
; GENERAL INFORMATION:
;  APPLICANT: Weiner, George
;  APPLICANT:  Hartmann, Gunther
;  TITLE OF INVENTION: Methods for Enhancing Antibody-Induced
```

```
;  TITLE OF INVENTION:  Cell Lysis and Treating Cancer
;  FILE REFERENCE: C1039/7052 (AWS)
;  CURRENT APPLICATION NUMBER: US/09/888,326
;  CURRENT FILING DATE:  2001-06-22
;  PRIOR APPLICATION NUMBER: US 60/213,346
;  PRIOR FILING DATE: 2000-06-22
;  NUMBER OF SEQ ID NOS: 848
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 63
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
;   NAME/KEY: misc_feature
;   LOCATION: (0)...(0)
;   OTHER INFORMATION: phosphodiester backbone
US-09-888-326-63

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 5.5;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db         20 TCCATGTCGGTCCTGATGCT 1


Search completed: April 17, 2006, 20:43:34
Job time : 366.5 secs
```

GenCore version 5.1.7

OM nucleic - nucleic search, using sw model

Run on: April 17, 2006, 17:33:01 ; Search time 425 Seconds
(without alignments)
189.545 Million cell updates/sec

Title: US-09-818-918-37
Perfect score: 20
Sequence: 1 tccatgtcggtcctgatgct 20

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 9281099 seqs, 2013915447 residues

Total number of hits satisfying chosen parameters: 18562198

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_NA_New:*
1: /SIDS5/ptodata/1/pubpna/US08_NEW_PUB.seq:*
2: /SIDS5/ptodata/1/pubpna/US06_NEW_PUB.seq:*
3: /SIDS5/ptodata/1/pubpna/US07_NEW_PUB.seq:*
4: /SIDS5/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
5: /SIDS5/ptodata/1/pubpna/US09_NEW_PUB.seq:*
6: /SIDS5/ptodata/1/pubpna/US09_NEW_PUB.seq1:*
7: /SIDS5/ptodata/1/pubpna/US10_NEW_PUB.seq:*
8: /SIDS5/ptodata/1/pubpna/US10_NEW_PUB.seq1:*
9: /SIDS5/ptodata/1/pubpna/US10_NEW_PUB.seq2:*
10: /SIDS5/ptodata/1/pubpna/US10_NEW_PUB.seq3:*
11: /SIDS5/ptodata/1/pubpna/US11_NEW_PUB.seq:*
12: /SIDS5/ptodata/1/pubpna/US11_NEW_PUB.seq2:*
13: /SIDS5/ptodata/1/pubpna/US11_NEW_PUB.seq3:*
14: /SIDS5/ptodata/1/pubpna/US11_NEW_PUB.seq4:*
15: /SIDS5/ptodata/1/pubpna/US60_NEW_PUB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	20	100.0	20	8	US-10-619-279-28	Sequence 28, Appl
2	20	100.0	20	8	US-10-435-656-31	Sequence 31, Appl
3	20	100.0	20	8	US-10-435-656-33	Sequence 33, Appl
4	20	100.0	20	8	US-10-435-656-34	Sequence 34, Appl
5	20	100.0	20	8	US-10-435-656-37	Sequence 37, Appl
6	20	100.0	20	10	US-10-382-822-28	Sequence 28, Appl
7	20	100.0	20	12	US-11-127-797-21	Sequence 21, Appl
8	20	100.0	20	12	US-11-127-803-21	Sequence 21, Appl
9	20	100.0	20	12	US-11-128-127-21	Sequence 21, Appl
10	20	100.0	20	14	US-11-127-654-377	Sequence 377, App
c 11	20	100.0	20	14	US-11-127-654-383	Sequence 383, App
c 12	20	100.0	20	14	US-11-127-654-444	Sequence 444, App
13	20	100.0	20	14	US-11-127-654-550	Sequence 550, App
14	20	100.0	20	14	US-11-127-654-735	Sequence 735, App
15	20	100.0	20	14	US-11-127-654-736	Sequence 736, App
16	20	100.0	20	14	US-11-134-918-31	Sequence 31, Appl
17	20	100.0	20	14	US-11-134-918-33	Sequence 33, Appl
18	20	100.0	20	14	US-11-134-918-34	Sequence 34, Appl
19	20	100.0	20	14	US-11-134-918-37	Sequence 37, Appl
20	20	100.0	20	14	US-11-031-460-31	Sequence 31, Appl
21	20	100.0	20	14	US-11-031-460-33	Sequence 33, Appl
22	20	100.0	20	14	US-11-031-460-34	Sequence 34, Appl
23	20	100.0	20	14	US-11-031-460-37	Sequence 37, Appl
24	20	100.0	20	14	US-11-067-587-31	Sequence 31, Appl
25	20	100.0	20	14	US-11-067-587-33	Sequence 33, Appl
26	20	100.0	20	14	US-11-067-587-34	Sequence 34, Appl
27	20	100.0	20	14	US-11-067-587-37	Sequence 37, Appl
28	20	100.0	20	14	US-11-099-683-95	Sequence 95, Appl
29	20	100.0	20	14	US-11-099-683-96	Sequence 96, Appl
30	20	100.0	20	14	US-11-099-683-97	Sequence 97, Appl
31	20	100.0	20	14	US-11-099-683-98	Sequence 98, Appl
32	19	95.0	19	14	US-11-127-654-765	Sequence 765, App
33	19	95.0	20	8	US-10-497-591A-96	Sequence 96, Appl
34	19	95.0	20	8	US-10-619-279-30	Sequence 30, Appl
35	19	95.0	20	8	US-10-619-279-31	Sequence 31, Appl
36	19	95.0	20	10	US-10-382-822-30	Sequence 30, Appl
37	19	95.0	20	10	US-10-382-822-31	Sequence 31, Appl
38	19	95.0	20	12	US-11-127-797-23	Sequence 23, Appl
39	19	95.0	20	12	US-11-127-797-24	Sequence 24, Appl
40	19	95.0	20	12	US-11-127-803-23	Sequence 23, Appl
41	19	95.0	20	12	US-11-127-803-24	Sequence 24, Appl
42	19	95.0	20	12	US-11-128-127-23	Sequence 23, Appl
43	19	95.0	20	12	US-11-128-127-24	Sequence 24, Appl
44	19	95.0	20	14	US-11-099-683-100	Sequence 100, App
45	19	95.0	20	14	US-11-099-683-104	Sequence 104, App

ALIGNMENTS

RESULT 1
US-10-619-279-28
; Sequence 28, Application US/10619279
; Publication No. US20050267057A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7023/HCL
; CURRENT APPLICATION NUMBER: US/10/619,279
; CURRENT FILING DATE: 2003-07-14
; PRIOR APPLICATION NUMBER: US 08/960,774
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 123
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 28
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-619-279-28

Query Match 100.0%; Score 20; DB 8; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.4;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGGTCCTGATGCT 20

RESULT 2
US-10-435-656-31
; Sequence 31, Application US/10435656
; Publication No. US20050277604A1

; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AWS)
; CURRENT APPLICATION NUMBER: US/10/435,656
; CURRENT FILING DATE: 2003-05-09
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 31
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-10-435-656-31

Query Match 100.0%; Score 20; DB 8; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.4;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGGTCCTGATGCT 20

RESULT 3
US-10-435-656-33
; Sequence 33, Application US/10435656
; Publication No. US20050277604A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AWS)
; CURRENT APPLICATION NUMBER: US/10/435,656
; CURRENT FILING DATE: 2003-05-09
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 33
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (8)...(8)
; OTHER INFORMATION: m5c
US-10-435-656-33

Query Match 100.0%; Score 20; DB 8; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.4;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGGTCCTGATGCT 20

RESULT 4
US-10-435-656-34
; Sequence 34, Application US/10435656
; Publication No. US20050277604A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AWS)
; CURRENT APPLICATION NUMBER: US/10/435,656
; CURRENT FILING DATE: 2003-05-09
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 34
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (12)...(12)
; OTHER INFORMATION: m5c
US-10-435-656-34

Query Match 100.0%; Score 20; DB 8; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.4;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGGTCCTGATGCT 20

RESULT 5
US-10-435-656-37
; Sequence 37, Application US/10435656
; Publication No. US20050277604A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AWS)
; CURRENT APPLICATION NUMBER: US/10/435,656
; CURRENT FILING DATE: 2003-05-09
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 37
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-10-435-656-37

```
  Query Match             100.0%;  Score 20;  DB 8;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.4;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 6
US-10-382-822-28
; Sequence 28, Application US/10382822
; Publication No. US20060058251A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: Methods for Treating and Preventing
;  TITLE OF INVENTION:  Infectious Disease
;  FILE REFERENCE: C01039.70062.US
;  CURRENT APPLICATION NUMBER: US/10/382,822
;  CURRENT FILING DATE:  2003-03-06
;  PRIOR APPLICATION NUMBER: US 09/630,319
;  PRIOR FILING DATE: 2000-07-31
;  PRIOR APPLICATION NUMBER: US 08/960,774
;  PRIOR FILING DATE: 1997-10-30
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  NUMBER OF SEQ ID NOS: 124
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 28
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Oligonucleotide
US-10-382-822-28

  Query Match             100.0%;  Score 20;  DB 10;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.4;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 7
US-11-127-797-21
; Sequence 21, Application US/11127797
; Publication No. US20050245477A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: IMMUNOMODULATORY OLIGONUCLEOTIDES
;  FILE REFERENCE: C1039/7029
;  CURRENT APPLICATION NUMBER: US/11/127,797
;  CURRENT FILING DATE:  2005-05-11
;  PRIOR APPLICATION NUMBER: US/10/690,495
;  PRIOR FILING DATE: 2003-10-21
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  NUMBER OF SEQ ID NOS: 27
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 21
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-11-127-797-21

  Query Match             100.0%;  Score 20;  DB 12;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.4;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 8
US-11-127-803-21
; Sequence 21, Application US/11127803
; Publication No. US20050244379A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: IMMUNOMODULATORY OLIGONUCLEOTIDES
;  FILE REFERENCE: C1039/7029
;  CURRENT APPLICATION NUMBER: US/11/127,803
;  CURRENT FILING DATE:  2005-05-11
;  PRIOR APPLICATION NUMBER: US/10/690,495
;  PRIOR FILING DATE: 2003-10-21
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  NUMBER OF SEQ ID NOS: 27
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 21
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-11-127-803-21

  Query Match             100.0%;  Score 20;  DB 12;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.4;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 9
US-11-128-127-21
; Sequence 21, Application US/11128127
; Publication No. US20050244380A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: IMMUNOMODULATORY OLIGONUCLEOTIDES
;  FILE REFERENCE: C1039/7029
;  CURRENT APPLICATION NUMBER: US/11/128,127
;  CURRENT FILING DATE:  2005-05-11
;  PRIOR APPLICATION NUMBER: US/10/690,495
;  PRIOR FILING DATE: 2003-10-21
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  NUMBER OF SEQ ID NOS: 27
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 21
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
```

US-11-128-127-21

Query Match 100.0%; Score 20; DB 12; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.4;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20
```

RESULT 10
US-11-127-654-377
; Sequence 377, Application US/11127654
; Publication No. US20050250726A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Berg, Daniel J.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
; TITLE OF INVENTION: INFLAMMATORY DISEASES
; FILE REFERENCE: C1039.70060US01
; CURRENT APPLICATION NUMBER: US/11/127,654
; CURRENT FILING DATE: 2005-05-12
; PRIOR APPLICATION NUMBER: US 10/112,653
; PRIOR FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/279,642
; PRIOR FILING DATE: 2001-03-29
; NUMBER OF SEQ ID NOS: 1040
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 377
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-127-654-377

Query Match 100.0%; Score 20; DB 14; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.4;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20
```

RESULT 11
US-11-127-654-383/c
; Sequence 383, Application US/11127654
; Publication No. US20050250726A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Berg, Daniel J.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
; TITLE OF INVENTION: INFLAMMATORY DISEASES
; FILE REFERENCE: C1039.70060US01
; CURRENT APPLICATION NUMBER: US/11/127,654
; CURRENT FILING DATE: 2005-05-12
; PRIOR APPLICATION NUMBER: US 10/112,653
; PRIOR FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/279,642
; PRIOR FILING DATE: 2001-03-29
; NUMBER OF SEQ ID NOS: 1040
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 383
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-127-654-383

Query Match 100.0%; Score 20; DB 14; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.4;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db         20 TCCATGTCGGTCCTGATGCT 1
```

RESULT 12
US-11-127-654-444/c
; Sequence 444, Application US/11127654
; Publication No. US20050250726A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Berg, Daniel J.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
; TITLE OF INVENTION: INFLAMMATORY DISEASES
; FILE REFERENCE: C1039.70060US01
; CURRENT APPLICATION NUMBER: US/11/127,654
; CURRENT FILING DATE: 2005-05-12
; PRIOR APPLICATION NUMBER: US 10/112,653
; PRIOR FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/279,642
; PRIOR FILING DATE: 2001-03-29
; NUMBER OF SEQ ID NOS: 1040
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 444
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-127-654-444

Query Match 100.0%; Score 20; DB 14; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.4;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db         20 TCCATGTCGGTCCTGATGCT 1
```

RESULT 13
US-11-127-654-550
; Sequence 550, Application US/11127654
; Publication No. US20050250726A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Berg, Daniel J.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
; TITLE OF INVENTION: INFLAMMATORY DISEASES
; FILE REFERENCE: C1039.70060US01
; CURRENT APPLICATION NUMBER: US/11/127,654
; CURRENT FILING DATE: 2005-05-12
; PRIOR APPLICATION NUMBER: US 10/112,653
; PRIOR FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/279,642
; PRIOR FILING DATE: 2001-03-29
; NUMBER OF SEQ ID NOS: 1040
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 550
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-127-654-550

Query Match 100.0%; Score 20; DB 14; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.4;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20
```

RESULT 14
US-11-127-654-735
; Sequence 735, Application US/11127654
; Publication No. US20050250726A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Berg, Daniel J.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
; TITLE OF INVENTION: INFLAMMATORY DISEASES
; FILE REFERENCE: C1039.70060US01
; CURRENT APPLICATION NUMBER: US/11/127,654
; CURRENT FILING DATE: 2005-05-12
; PRIOR APPLICATION NUMBER: US 10/112,653
; PRIOR FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/279,642
; PRIOR FILING DATE: 2001-03-29
; NUMBER OF SEQ ID NOS: 1040
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 735
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (8)..(8)
; OTHER INFORMATION: m5c
US-11-127-654-735

```
  Query Match             100.0%;  Score 20;  DB 14;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.4;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20
```

RESULT 15
US-11-127-654-736
; Sequence 736, Application US/11127654
; Publication No. US20050250726A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Berg, Daniel J.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
; TITLE OF INVENTION: INFLAMMATORY DISEASES
; FILE REFERENCE: C1039.70060US01
; CURRENT APPLICATION NUMBER: US/11/127,654
; CURRENT FILING DATE: 2005-05-12
; PRIOR APPLICATION NUMBER: US 10/112,653
; PRIOR FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/279,642
; PRIOR FILING DATE: 2001-03-29
; NUMBER OF SEQ ID NOS: 1040
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 736
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (12)..(12)
; OTHER INFORMATION: m5c
US-11-127-654-736

```
  Query Match             100.0%;  Score 20;  DB 14;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.4;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20
```

Search completed: April 17, 2006, 18:51:09
Job time : 425.125 secs

GenCore version 5.1.7

OM nucleic - nucleic search, using sw model

Run on: April 17, 2006, 14:43:57 ; Search time 56.375 Seconds
(without alignments)
630.621 Million cell updates/sec

Title: US-09-818-918-38
Perfect score: 20
Sequence: 1 tccatgccggtcctgatgct 20

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 1303057 seqs, 888780828 residues

Total number of hits satisfying chosen parameters: 2606114

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_NA:*
1: /cgn2_6/ptodata/1/ina/1_COMB.seq:*
2: /cgn2_6/ptodata/1/ina/5_COMB.seq:*
3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/1/ina/H_COMB.seq:*
6: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
7: /cgn2_6/ptodata/1/ina/PP_COMB.seq:*
8: /cgn2_6/ptodata/1/ina/RE_COMB.seq:*
9: /cgn2_6/ptodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	20	100.0	20	3	US-08-738-652-38	Sequence 38, Appl
2	20	100.0	20	3	US-09-286-098-43	Sequence 43, Appl
3	20	100.0	20	3	US-08-960-774-33	Sequence 33, Appl
4	20	100.0	20	3	US-09-325-193A-36	Sequence 36, Appl
5	20	100.0	20	3	US-09-191-170-38	Sequence 38, Appl
6	20	100.0	20	3	US-09-337-619-33	Sequence 33, Appl
7	20	100.0	20	3	US-09-954-987B-86	Sequence 86, Appl
8	20	100.0	20	3	US-09-672-126B-85	Sequence 85, Appl
9	18.4	92.0	20	2	US-08-436-714-7	Sequence 7, Appli
10	18.4	92.0	20	2	US-08-442-705-7	Sequence 7, Appli
11	18.4	92.0	20	2	US-08-332-829-7	Sequence 7, Appli
12	18.4	92.0	20	3	US-08-386-063-21	Sequence 21, Appl
13	18.4	92.0	20	3	US-08-386-063-22	Sequence 22, Appl
14	18.4	92.0	20	3	US-08-386-063-21	Sequence 21, Appl
15	18.4	92.0	20	3	US-08-386-063-22	Sequence 22, Appl
16	18.4	92.0	20	3	US-08-738-652-31	Sequence 31, Appl
17	18.4	92.0	20	3	US-08-738-652-32	Sequence 32, Appl
18	18.4	92.0	20	3	US-08-738-652-33	Sequence 33, Appl
19	18.4	92.0	20	3	US-08-738-652-34	Sequence 34, Appl
20	18.4	92.0	20	3	US-08-738-652-37	Sequence 37, Appl
21	18.4	92.0	20	3	US-08-738-652-39	Sequence 39, Appl
22	18.4	92.0	20	3	US-08-738-652-40	Sequence 40, Appl
23	18.4	92.0	20	3	US-09-286-098-21	Sequence 21, Appl
24	18.4	92.0	20	3	US-09-286-098-22	Sequence 22, Appl
25	18.4	92.0	20	3	US-09-286-098-23	Sequence 23, Appl
26	18.4	92.0	20	3	US-09-286-098-42	Sequence 42, Appl
27	18.4	92.0	20	3	US-09-286-098-44	Sequence 44, Appl
28	18.4	92.0	20	3	US-09-286-098-45	Sequence 45, Appl
29	18.4	92.0	20	3	US-08-960-774-28	Sequence 28, Appl
30	18.4	92.0	20	3	US-08-960-774-29	Sequence 29, Appl
31	18.4	92.0	20	3	US-08-960-774-34	Sequence 34, Appl
32	18.4	92.0	20	3	US-08-960-774-35	Sequence 35, Appl
33	18.4	92.0	20	3	US-09-325-193A-17	Sequence 17, Appl
34	18.4	92.0	20	3	US-09-325-193A-18	Sequence 18, Appl
35	18.4	92.0	20	3	US-09-325-193A-35	Sequence 35, Appl
36	18.4	92.0	20	3	US-09-325-193A-37	Sequence 37, Appl
37	18.4	92.0	20	3	US-09-325-193A-38	Sequence 38, Appl
38	18.4	92.0	20	3	US-09-191-170-20	Sequence 20, Appl
39	18.4	92.0	20	3	US-09-191-170-21	Sequence 21, Appl
40	18.4	92.0	20	3	US-09-191-170-22	Sequence 22, Appl
41	18.4	92.0	20	3	US-09-191-170-23	Sequence 23, Appl
42	18.4	92.0	20	3	US-09-191-170-39	Sequence 39, Appl
43	18.4	92.0	20	3	US-09-191-170-40	Sequence 40, Appl
44	18.4	92.0	20	3	US-09-337-619-28	Sequence 28, Appl
45	18.4	92.0	20	3	US-09-337-619-29	Sequence 29, Appl

ALIGNMENTS

RESULT 1
US-08-738-652-38
; Sequence 38, Application US/08738652B
; Patent No. 6207646
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7004 HCL
; CURRENT APPLICATION NUMBER: US/08/738,652B
; CURRENT FILING DATE: 1996-10-30
; EARLIER APPLICATION NUMBER: US 08/276,358
; EARLIER FILING DATE: 1994-07-15
; EARLIER APPLICATION NUMBER: US 08/386,063
; EARLIER FILING DATE: 1995-02-07
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 38
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-08-738-652-38

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 3.9;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGCCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGCCGGTCCTGATGCT 20

RESULT 2
US-09-286-098-43
; Sequence 43, Application US/09286098
; Patent No. 6218371
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Weiner, George
; TITLE OF INVENTION: Methods and Products for Stimulating the
; TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
; TITLE OF INVENTION: Cytokines
; FILE REFERENCE: C1039/7026/HCL
; CURRENT APPLICATION NUMBER: US/09/286,098
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,729

```
;  EARLIER FILING DATE: 1998-04-03
;  NUMBER OF SEQ ID NOS: 105
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 43
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Sequence
US-09-286-098-43

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 3.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGCCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGCCGGTCCTGATGCT 20


RESULT 3
US-08-960-774-33
; Sequence 33, Application US/08960774
; Patent No. 6239116
;  GENERAL INFORMATION:
;    APPLICANT:  Krieg et al.,
;    TITLE OF INVENTION:  IMMUNOSTIMULATORY NUCLEIC ACID MOLECULES
;    NUMBER OF SEQUENCES:  111
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Fish & Richardson P.C.
;      STREET:  4225 Executive Square, Suite 1400
;      CITY:  La Jolla
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  92037
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  ASCII text
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/960,774
;      FILING DATE:  30-October-1997
;      CLASSIFICATION:  514
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  U.S. Serial No. 6239116  08/738,652
;      FILING DATE:  October 30, 1996
;      CLASSIFICATION:  514
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Haile, Lisa A.
;      REGISTRATION NUMBER:  38,347
;      REFERENCE/DOCKET NUMBER:  08918/012001
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  619/678-5070
;      TELEFAX:  619/678-5099
;  INFORMATION FOR SEQ ID NO:  33:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
US-08-960-774-33

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 3.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGCCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGCCGGTCCTGATGCT 20


RESULT 4
US-09-325-193A-36
; Sequence 36, Application US/09325193A
; Patent No. 6406705
; GENERAL INFORMATION:
;  APPLICANT:  Davis, Heather L.
;  APPLICANT:  Schorr, Joachim
;  APPLICANT:  Krieg, Arthur M.
;  TITLE OF INVENTION:  Use of Nucleic Acids Containing
;  TITLE OF INVENTION:  Unmethylated CpG Dinucleotide as an Adjuvant
;  FILE REFERENCE:  C1039/7025/HCL
;  CURRENT APPLICATION NUMBER: US/09/325,193A
;  CURRENT FILING DATE:  1999-06-03
;  PRIOR APPLICATION NUMBER:  US 09/154,614
;  PRIOR FILING DATE:  1998-09-16
;  PRIOR APPLICATION NUMBER:  PCT/US98/04703
;  PRIOR FILING DATE:  1998-03-10
;  PRIOR APPLICATION NUMBER:  US 60/040,376
;  PRIOR FILING DATE:  1997-03-10
;  NUMBER OF SEQ ID NOS:  98
;  SOFTWARE:  FastSEQ for Windows Version 3.0
; SEQ ID NO 36
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Oligonucleotide
US-09-325-193A-36

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 3.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGCCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGCCGGTCCTGATGCT 20


RESULT 5
US-09-191-170-38
; Sequence 38, Application US/09191170
; Patent No. 6429199
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT: Hartmann, Gunther
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  TITLE OF INVENTION: for Activating Dendritic Cells
;  FILE REFERENCE: C1039/7017
;  CURRENT APPLICATION NUMBER: US/09/191,170
;  CURRENT FILING DATE: 1998-11-13
;  EARLIER APPLICATION NUMBER: US 08/960,774
;  EARLIER FILING DATE: 1997-10-30
;  EARLIER APPLICATION NUMBER: US 08/738,652
;  EARLIER FILING DATE: 1996-10-30
;  EARLIER APPLICATION NUMBER: US 08/386,063
;  EARLIER FILING DATE: 1995-02-07
;  EARLIER APPLICATION NUMBER: US 08/276,358
;  EARLIER FILING DATE: 1994-07-15
;  NUMBER OF SEQ ID NOS: 99
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 38
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: synthetic oligonucleotide
US-09-191-170-38

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 3.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGCCGGTCCTGATGCT 20
```

```
                    ||||||||||||||||||||
Db          1 TCCATGCCGGTCCTGATGCT 20


RESULT 6
US-09-337-619-33
; Sequence 33, Application US/09337619
; Patent No. 6653292
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  TITLE OF INVENTION: Methods of Treating Cancer Using
;  TITLE OF INVENTION: Immunostimulatory Oligonucleotides
;  FILE REFERENCE: C1039/7021/HCL
;  CURRENT APPLICATION NUMBER: US/09/337,619
;  CURRENT FILING DATE: 1999-06-21
;  EARLIER APPLICATION NUMBER: US 08/960,774
;  EARLIER FILING DATE: 1997-10-30
;  EARLIER APPLICATION NUMBER: US 08/738,652
;  EARLIER FILING DATE: 1996-10-30
;  EARLIER APPLICATION NUMBER: US 08/386,063
;  EARLIER FILING DATE: 1995-02-07
;  EARLIER APPLICATION NUMBER: US 08/276,358
;  EARLIER FILING DATE: 1994-07-15
;  NUMBER OF SEQ ID NOS: 123
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 33
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Oligonucleotide
US-09-337-619-33

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 3.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGCCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGCCGGTCCTGATGCT 20


RESULT 7
US-09-954-987B-86
; Sequence 86, Application US/09954987B
; Patent No. 6943240
; GENERAL INFORMATION:
;  APPLICANT: Stefan Bauer
;  APPLICANT:  Grayson B. Lipford
;  APPLICANT:  Hermann Wagner
;  TITLE OF INVENTION: PROCESS FOR HIGH THROUGHPUT SCREENING OF
;  TITLE OF INVENTION:  CpG-BASED IMMUNO-AGONIST/ANTAGONIST
;  FILE REFERENCE: C1041/7016 (AWS)
;  CURRENT APPLICATION NUMBER: US/09/954,987B
;  CURRENT FILING DATE:  2001-09-17
;  PRIOR APPLICATION NUMBER: US 60/233,035
;  PRIOR FILING DATE: 2000-09-15
;  PRIOR APPLICATION NUMBER: US 60/263,657
;  PRIOR FILING DATE: 2001-01-23
;  PRIOR APPLICATION NUMBER: US 60/291,726
;  PRIOR FILING DATE: 2001-05-17
;  PRIOR APPLICATION NUMBER: US 60/300,210
;  PRIOR FILING DATE: 2001-06-22
;  NUMBER OF SEQ ID NOS: 230
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 86
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-09-954-987B-86

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 3.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGCCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGCCGGTCCTGATGCT 20


RESULT 8
US-09-672-126B-85
; Sequence 85, Application US/09672126B
; Patent No. 6949520
; GENERAL INFORMATION:
;  APPLICANT: Hartmann, Gunther
;  APPLICANT:  Bratzler, Robert L.
;  APPLICANT:  Krieg, Arthur
;  TITLE OF INVENTION: Methods Related to Immunostimulatory
;  TITLE OF INVENTION:  Nucleic Acid-Induced Interferon
;  FILE REFERENCE: C1039/7044
;  CURRENT APPLICATION NUMBER: US/09/672,126B
;  CURRENT FILING DATE:  2000-09-27
;  PRIOR APPLICATION NUMBER: 60/156,147
;  PRIOR FILING DATE: 1999-09-29
;  NUMBER OF SEQ ID NOS: 169
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 85
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Oligonucleotide
US-09-672-126B-85

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 3.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGCCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGCCGGTCCTGATGCT 20


RESULT 9
US-08-436-714-7
; Sequence 7, Application US/08436714
; Patent No. 5602244
;  GENERAL INFORMATION:
;    APPLICANT:  Marvin H. Caruthers et al
;    TITLE OF INVENTION:  Nucleoside and Polynucleotide
;    TITLE OF INVENTION:  Thiophosphoramidite and Phosphorodithioate Compounds and Proc
;    NUMBER OF SEQUENCES:  8
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Yahwak & Associates
;      STREET:  25 Skytop Drive
;      CITY:  Trumbull
;      STATE:  Connecticut
;      COUNTRY:  USA
;      ZIP:  06611
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  floppy disk
;      COMPUTER:  Macintosh
;      OPERATING SYSTEM:  MS-DOS
;      SOFTWARE:  Microsoft Word 4.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/436,714
;      FILING DATE:
;      CLASSIFICATION:  536
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  George M. Yahwak
;      REGISTRATION NUMBER:  26,824
;      REFERENCE/DOCKET NUMBER:  CU 311 BIGCIP
;    TELECOMMUNICATION INFORMATION:
```

```
;      TELEPHONE:  (203)268-1951
;      TELEFAX:  (203)268-1951
;   INFORMATION FOR SEQ ID NO:  7:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  20 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  DNA
US-08-436-714-7

  Query Match             92.0%;  Score 18.4;  DB 2;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 22;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGCCGGTCCTGATGCT 20
              |||||| ||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 10
US-08-442-705-7
; Sequence 7, Application US/08442705
; Patent No. 5684148
;  GENERAL INFORMATION:
;    APPLICANT:  Marvin H. Caruthers et al
;    TITLE OF INVENTION:  Nucleoside and Polynucleotide
;    TITLE OF INVENTION:  Thiophosphoramidite and Phosphorodithioate Compounds and Proce
;    NUMBER OF SEQUENCES:  8
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Yahwak & Associates
;      STREET:  25 Skytop Drive
;      CITY:  Trumbull
;      STATE:  Connecticut
;      COUNTRY:  USA
;      ZIP:  06611
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  floppy disk
;      COMPUTER:  Macintosh
;      OPERATING SYSTEM:  MS-DOS
;      SOFTWARE:  Microsoft Word 4.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/442,705
;      FILING DATE:
;      CLASSIFICATION:  536
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  George M. Yahwak
;      REGISTRATION NUMBER:  26,824
;      REFERENCE/DOCKET NUMBER:  CU 311 BIGCIP
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (203)268-1951
;      TELEFAX:  (203)268-1951
;  INFORMATION FOR SEQ ID NO:  7:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-442-705-7

  Query Match             92.0%;  Score 18.4;  DB 2;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 22;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGCCGGTCCTGATGCT 20
              |||||| ||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 11
US-08-332-829-7
; Sequence 7, Application US/08332829
; Patent No. 5750666
;  GENERAL INFORMATION:
;    APPLICANT:  Marvin H. Caruthers et al
;    TITLE OF INVENTION:  Nucleoside and Polynucleotide
;    TITLE OF INVENTION:  Thiophosphoramidite and Phosphorodithioate Compounds and Proce
;    NUMBER OF SEQUENCES:  8
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Yahwak & Associates
;      STREET:  25 Skytop Drive
;      CITY:  Trumbull
;      STATE:  Connecticut
;      COUNTRY:  USA
;      ZIP:  06611
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  floppy disk
;      COMPUTER:  Macintosh
;      OPERATING SYSTEM:  MS-DOS
;      SOFTWARE:  Microsoft Word 4.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/332,829
;      FILING DATE:
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  George M. Yahwak
;      REGISTRATION NUMBER:  26,824
;      REFERENCE/DOCKET NUMBER:  CU 311 BIGCIP
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (203)268-1951
;      TELEFAX:  (203)268-1951
;  INFORMATION FOR SEQ ID NO:  7:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-332-829-7

  Query Match             92.0%;  Score 18.4;  DB 2;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 22;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGCCGGTCCTGATGCT 20
              |||||| ||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 12
US-08-386-063-21
; Sequence 21, Application US/08386063
; Patent No. 6008200
;  GENERAL INFORMATION:
;    APPLICANT:  Arthur M. Krieg, M.D.
;    TITLE OF INVENTION:  IMMUNOMODULATORY OLIGONUCLEOTIDES
;    NUMBER OF SEQUENCES:  27
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  LAHIVE & COCKFIELD
;      STREET:  60 STATE STREET, SUITE 510
;      CITY:  BOSTON
;      STATE:  MASSACHUSETTS
;      COUNTRY:  USA
;      ZIP:  02109-1875
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  ASCII text
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/386,063
;      FILING DATE:
;      CLASSIFICATION:  424
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  ARNOLD, BETH E.
```

```
;       REGISTRATION NUMBER:  35,430
;       REFERENCE/DOCKET NUMBER:  UIZ-013CP
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (617)227-7400
;       TELEFAX:  (617)227-5941
;   INFORMATION FOR SEQ ID NO:  21:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  20 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  DNA
US-08-386-063-21

  Query Match             92.0%;  Score 18.4;  DB 3;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 22;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGCCGGTCCTGATGCT 20
              |||||| ||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 13
US-08-386-063-22
; Sequence 22, Application US/08386063
; Patent No. 6008200
;  GENERAL INFORMATION:
;    APPLICANT:  Arthur M. Krieg, M.D.
;    TITLE OF INVENTION:  IMMUNOMODULATORY OLIGONUCLEOTIDES
;    NUMBER OF SEQUENCES:  27
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  LAHIVE & COCKFIELD
;      STREET:  60 STATE STREET, SUITE 510
;      CITY:  BOSTON
;      STATE:  MASSACHUSETTS
;      COUNTRY:  USA
;      ZIP:  02109-1875
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  ASCII text
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/386,063
;      FILING DATE:
;      CLASSIFICATION:  424
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  ARNOLD, BETH E.
;      REGISTRATION NUMBER:  35,430
;      REFERENCE/DOCKET NUMBER:  UIZ-013CP
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (617)227-7400
;      TELEFAX:  (617)227-5941
;  INFORMATION FOR SEQ ID NO:  22:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-386-063-22

  Query Match             92.0%;  Score 18.4;  DB 3;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 22;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGCCGGTCCTGATGCT 20
              ||||||| ||||||||||||
Db          1 TCCATGCTGGTCCTGATGCT 20


RESULT 14
```

```
US-08-386-063-21
; Sequence 21, Application US/08386063
; Patent No. 6194388
;  GENERAL INFORMATION:
;    APPLICANT:  Arthur M. Krieg, M.D.
;    TITLE OF INVENTION:  IMMUNOMODULATORY OLIGONUCLEOTIDES
;    NUMBER OF SEQUENCES:  27
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  LAHIVE & COCKFIELD
;      STREET:  60 STATE STREET, SUITE 510
;      CITY:  BOSTON
;      STATE:  MASSACHUSETTS
;      COUNTRY:  USA
;      ZIP:  02109-1875
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  ASCII text
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/386,063
;      FILING DATE:
;      CLASSIFICATION:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  ARNOLD, BETH E.
;      REGISTRATION NUMBER:  35,430
;      REFERENCE/DOCKET NUMBER:  UIZ-013CP
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (617)227-7400
;      TELEFAX:  (617)227-5941
;  INFORMATION FOR SEQ ID NO:  21:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-386-063-21

  Query Match             92.0%;  Score 18.4;  DB 3;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 22;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGCCGGTCCTGATGCT 20
              |||||| ||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 15
US-08-386-063-22
; Sequence 22, Application US/08386063
; Patent No. 6194388
;  GENERAL INFORMATION:
;    APPLICANT:  Arthur M. Krieg, M.D.
;    TITLE OF INVENTION:  IMMUNOMODULATORY OLIGONUCLEOTIDES
;    NUMBER OF SEQUENCES:  27
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  LAHIVE & COCKFIELD
;      STREET:  60 STATE STREET, SUITE 510
;      CITY:  BOSTON
;      STATE:  MASSACHUSETTS
;      COUNTRY:  USA
;      ZIP:  02109-1875
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  ASCII text
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/386,063
;      FILING DATE:
;      CLASSIFICATION:
;    ATTORNEY/AGENT INFORMATION:
```

; NAME: ARNOLD, BETH E.
; REGISTRATION NUMBER: 35,430
; REFERENCE/DOCKET NUMBER: UIZ-013CP
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617)227-7400
; TELEFAX: (617)227-5941
; INFORMATION FOR SEQ ID NO: 22:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-386-063-22

Query Match 92.0%; Score 18.4; DB 3; Length 20;
Best Local Similarity 95.0%; Pred. No. 22;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```
Qy          1 TCCATGCCGGTCCTGATGCT 20
              ||||||| ||||||||||||
Db          1 TCCATGCTGGTCCTGATGCT 20
```

Search completed: April 17, 2006, 18:04:52
Job time : 56.375 secs

GenCore version 5.1.7

OM nucleic - nucleic search, using sw model

Run on: April 17, 2006, 17:32:13 ; Search time 366.375 Seconds
(without alignments)
451.416 Million cell updates/sec

Title: US-09-818-918-38
Perfect score: 20
Sequence: 1 tccatgccggtcctgatgct 20

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 9793542 seqs, 4134689005 residues

Total number of hits satisfying chosen parameters: 19587084

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_NA_Main:*
1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
2: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
3: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*
4: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:*
5: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
6: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
7: /cgn2_6/ptodata/1/pubpna/US10C_PUBCOMB.seq:*
8: /cgn2_6/ptodata/1/pubpna/US10D_PUBCOMB.seq:*
9: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq:*
10: /cgn2_6/ptodata/1/pubpna/US11_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	20	100.0	20	3	US-09-824-468-43	Sequence 43, Appl
2	20	100.0	20	3	US-09-800-266A-36	Sequence 36, Appl
3	20	100.0	20	3	US-09-895-007A-36	Sequence 36, Appl
4	20	100.0	20	3	US-09-920-313-36	Sequence 36, Appl
5	20	100.0	20	3	US-09-888-326-585	Sequence 585, App
6	20	100.0	20	3	US-09-818-918-38	Sequence 38, Appl
7	20	100.0	20	3	US-09-931-583-49	Sequence 49, Appl
8	20	100.0	20	3	US-09-776-479-775	Sequence 775, App
9	20	100.0	20	3	US-09-954-987B-86	Sequence 86, Appl
10	20	100.0	20	3	US-09-776-479-775	Sequence 775, App
11	20	100.0	20	5	US-10-023-909A-36	Sequence 36, Appl
12	20	100.0	20	5	US-10-112-653-748	Sequence 748, App
13	20	100.0	20	5	US-10-017-995-775	Sequence 775, App
14	20	100.0	20	5	US-10-300-247-36	Sequence 36, Appl
15	20	100.0	20	5	US-10-161-229-38	Sequence 38, Appl
16	20	100.0	20	6	US-10-187-264A-33	Sequence 33, Appl
17	20	100.0	20	6	US-10-265-072-85	Sequence 85, Appl
18	20	100.0	20	6	US-10-306-522-33	Sequence 33, Appl
19	20	100.0	20	6	US-10-314-578-775	Sequence 775, App
20	20	100.0	20	6	US-10-434-696-36	Sequence 36, Appl
21	20	100.0	20	7	US-10-373-381-31	Sequence 31, Appl
22	20	100.0	20	7	US-10-719-493-33	Sequence 33, Appl
23	20	100.0	20	7	US-10-627-331-33	Sequence 33, Appl
24	20	100.0	20	7	US-10-666-733-36	Sequence 36, Appl
25	20	100.0	20	7	US-10-743-625-38	Sequence 38, Appl
26	20	100.0	20	7	US-10-679-710-38	Sequence 38, Appl
27	20	100.0	20	7	US-10-769-282-38	Sequence 38, Appl
28	20	100.0	20	8	US-10-817-165-38	Sequence 38, Appl
29	20	100.0	20	8	US-10-877-407-40	Sequence 40, Appl
30	20	100.0	20	8	US-10-877-369-31	Sequence 31, Appl
31	20	100.0	20	8	US-10-816-220-36	Sequence 36, Appl
32	20	100.0	20	8	US-10-831-778-775	Sequence 775, App
33	20	100.0	20	8	US-10-876-892-31	Sequence 31, Appl
34	20	100.0	20	8	US-10-876-965-31	Sequence 31, Appl
35	20	100.0	20	8	US-10-888-886-36	Sequence 36, Appl
36	20	100.0	20	8	US-10-847-642-38	Sequence 38, Appl
37	20	100.0	20	8	US-10-888-785-38	Sequence 38, Appl
38	20	100.0	20	8	US-10-649-584-49	Sequence 49, Appl
39	20	100.0	20	8	US-10-831-775-36	Sequence 36, Appl
40	20	100.0	20	9	US-10-888-449-38	Sequence 38, Appl
41	20	100.0	20	9	US-10-894-862-40	Sequence 40, Appl
42	20	100.0	20	9	US-10-894-657-40	Sequence 40, Appl
43	20	100.0	20	9	US-10-884-852-38	Sequence 38, Appl
44	20	100.0	20	9	US-10-613-916-38	Sequence 38, Appl
45	20	100.0	20	9	US-10-627-413-33	Sequence 33, Appl

ALIGNMENTS

RESULT 1
US-09-824-468-43
; Sequence 43, Application US/09824468
; Patent No. US20020064515A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Weiner, George
; TITLE OF INVENTION: Methods and Products for Stimulating the
; TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
; TITLE OF INVENTION: Cytokines
; FILE REFERENCE: C1039/7026/HCL
; CURRENT APPLICATION NUMBER: US/09/824,468
; CURRENT FILING DATE: 2001-04-02
; PRIOR APPLICATION NUMBER: 09/286,098
; PRIOR FILING DATE: 1999-04-02
; NUMBER OF SEQ ID NOS: 105
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 43
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-824-468-43

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 11;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGCCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGCCGGTCCTGATGCT 20

RESULT 2
US-09-800-266A-36
; Sequence 36, Application US/09800266A
; Patent No. US20020156033A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids and
; TITLE OF INVENTION: Cancer Medicament Combination Therapy for the Treatment of
; TITLE OF INVENTION: Cancer
; FILE REFERENCE: C1037/7017(HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/800,266A

```
;  CURRENT FILING DATE:  2001-03-05
;  PRIOR APPLICATION NUMBER: US 60/187,214
;  PRIOR FILING DATE: 2000-03-03
;  NUMBER OF SEQ ID NOS: 146
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 36
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Sequence
US-09-800-266A-36

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 11;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGCCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGCCGGTCCTGATGCT 20


RESULT 3
US-09-895-007A-36
; Sequence 36, Application US/09895007A
; Patent No. US20020165178A1
; GENERAL INFORMATION:
;  APPLICANT: Schetter, Christian
;  APPLICANT:  Bratzler, Robert L.
;  APPLICANT:  Petersen, Deanna M.
;  TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACIDS FOR THE
;  TITLE OF INVENTION:  TREATMENT OF ANEMIA, THROMBOCYTOPENIA, AND NEUTROPENIA
;  FILE REFERENCE: C1041/7014 (AWS)
;  CURRENT APPLICATION NUMBER: US/09/895,007A
;  CURRENT FILING DATE:  2001-06-28
;  PRIOR APPLICATION NUMBER: US 60/214,368
;  PRIOR FILING DATE: 2000-06-28
;  NUMBER OF SEQ ID NOS: 133
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 36
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-09-895-007A-36

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 11;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGCCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGCCGGTCCTGATGCT 20


RESULT 4
US-09-920-313-36
; Sequence 36, Application US/09920313
; Publication No. US20020198165A1
; GENERAL INFORMATION:
;  APPLICANT: Bratzler, Robert L.
;  APPLICANT:  Petersen, Deanna M.
;  TITLE OF INVENTION: Nucleic Acids for the Prevention and
;  TITLE OF INVENTION:  Treatment of Gastric Ulcers
;  FILE REFERENCE: C1037/7019 (HCL/MAT)
;  CURRENT APPLICATION NUMBER: US/09/920,313
;  CURRENT FILING DATE:  2001-08-01
;  PRIOR APPLICATION NUMBER: US 60/222,248
;  PRIOR FILING DATE: 2001-08-08
;  NUMBER OF SEQ ID NOS: 148
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 36
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Sequence
US-09-920-313-36

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 11;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGCCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGCCGGTCCTGATGCT 20


RESULT 5
US-09-888-326-585
; Sequence 585, Application US/09888326
; Publication No. US20030026801A1
; GENERAL INFORMATION:
;  APPLICANT: Weiner, George
;  APPLICANT:  Hartmann, Gunther
;  TITLE OF INVENTION: Methods for Enhancing Antibody-Induced
;  TITLE OF INVENTION:  Cell Lysis and Treating Cancer
;  FILE REFERENCE: C1039/7052 (AWS)
;  CURRENT APPLICATION NUMBER: US/09/888,326
;  CURRENT FILING DATE:  2001-06-22
;  PRIOR APPLICATION NUMBER: US 60/213,346
;  PRIOR FILING DATE: 2000-06-22
;  NUMBER OF SEQ ID NOS: 848
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 585
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
;   NAME/KEY: misc_feature
;   LOCATION: (0)...(0)
;   OTHER INFORMATION: phosphodiester backbone
US-09-888-326-585

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 11;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGCCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGCCGGTCCTGATGCT 20


RESULT 6
US-09-818-918-38
; Sequence 38, Application US/09818918
; Publication No. US20030050261A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Kline, Joel N.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7048 (AWS)
;  CURRENT APPLICATION NUMBER: US/09/818,918
;  CURRENT FILING DATE:  2001-03-27
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  NUMBER OF SEQ ID NOS: 56
;  SOFTWARE: FastSEQ for Windows Version 3.0
```

; SEQ ID NO 38
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-09-818-918-38

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 11;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGCCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGCCGGTCCTGATGCT 20

RESULT 7
US-09-931-583-49
; Sequence 49, Application US/09931583
; Publication No. US20030050263A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred
; TITLE OF INVENTION: Methods and Products for Treating HIV Infection
; FILE REFERENCE: C1039/7053(HCL)
; CURRENT APPLICATION NUMBER: US/09/931,583
; CURRENT FILING DATE: 2001-08-16
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 09/415,142
; PRIOR FILING DATE: 1999-10-09
; NUMBER OF SEQ ID NOS: 75
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 49
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: Synthetic Oligonucleotide
US-09-931-583-49

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 11;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGCCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGCCGGTCCTGATGCT 20

RESULT 8
US-09-776-479-775
; Sequence 775, Application US/09776479
; Publication No. US20030087848A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; TITLE OF INVENTION: Treatment of Asthma and Allergy
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; CURRENT FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 775
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-775

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 11;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGCCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGCCGGTCCTGATGCT 20

RESULT 9
US-09-954-987B-86
; Sequence 86, Application US/09954987B
; Publication No. US20030104523A1
; GENERAL INFORMATION:
; APPLICANT: Stefan Bauer
; APPLICANT: Grayson B. Lipford
; APPLICANT: Hermann Wagner
; TITLE OF INVENTION: PROCESS FOR HIGH THROUGHPUT SCREENING OF
; TITLE OF INVENTION: CpG-BASED IMMUNO-AGONIST/ANTAGONIST
; FILE REFERENCE: C1041/7016 (AWS)
; CURRENT APPLICATION NUMBER: US/09/954,987B
; CURRENT FILING DATE: 2001-09-17
; PRIOR APPLICATION NUMBER: US 60/233,035
; PRIOR FILING DATE: 2000-09-15
; PRIOR APPLICATION NUMBER: US 60/263,657
; PRIOR FILING DATE: 2001-01-23
; PRIOR APPLICATION NUMBER: US 60/291,726
; PRIOR FILING DATE: 2001-05-17
; PRIOR APPLICATION NUMBER: US 60/300,210
; PRIOR FILING DATE: 2001-06-22
; NUMBER OF SEQ ID NOS: 230
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 86
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-09-954-987B-86

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 11;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGCCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGCCGGTCCTGATGCT 20

RESULT 10
US-09-776-479-775
; Sequence 775, Application US/09776479
; Publication No. US20040067902A9
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; TITLE OF INVENTION: Treatment of Asthma and Allergy
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; CURRENT FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 775
; LENGTH: 20

; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-775

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 11;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGCCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGCCGGTCCTGATGCT 20

RESULT 11
US-10-023-909A-36
; Sequence 36, Application US/10023909A
; Publication No. US20020164341A1
; GENERAL INFORMATION:
; APPLICANT: Davis, Heather L.
; APPLICANT: Schorr, Joachim
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Use of Nucleic Acids Containing
; TITLE OF INVENTION: Unmethylated CpG Dinucleotide as an Adjuvant
; FILE REFERENCE: C1039/7058/HCL
; CURRENT APPLICATION NUMBER: US/10/023,909A
; CURRENT FILING DATE: 2001-12-18
; PRIOR APPLICATION NUMBER: US 09/325,193
; PRIOR FILING DATE: 1999-06-03
; PRIOR APPLICATION NUMBER: US 09/154,614
; PRIOR FILING DATE: 1998-09-16
; PRIOR APPLICATION NUMBER: PCT/US98/04703
; PRIOR FILING DATE: 1998-03-10
; PRIOR APPLICATION NUMBER: US 60/040,376
; PRIOR FILING DATE: 1997-03-10
; NUMBER OF SEQ ID NOS: 98
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 36
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-023-909A-36

Query Match 100.0%; Score 20; DB 5; Length 20;
Best Local Similarity 100.0%; Pred. No. 11;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGCCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGCCGGTCCTGATGCT 20

RESULT 12
US-10-112-653-748
; Sequence 748, Application US/10112653
; Publication No. US20030050268A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Berg, Daniel J.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR
; TITLE OF INVENTION: TREATMENT OF NON-ALLERGIC INFLAMMATORY DISEASES
; FILE REFERENCE: C01039/70060(AWS)
; CURRENT APPLICATION NUMBER: US/10/112,653
; CURRENT FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/279,642
; PRIOR FILING DATE: 2001-03-29
; NUMBER OF SEQ ID NOS: 1040
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 748
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-112-653-748

Query Match 100.0%; Score 20; DB 5; Length 20;
Best Local Similarity 100.0%; Pred. No. 11;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGCCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGCCGGTCCTGATGCT 20

RESULT 13
US-10-017-995-775
; Sequence 775, Application US/10017995
; Publication No. US20030055014A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; TITLE OF INVENTION: Inhibition of Angiogenesis by Nucleic Acids
; FILE REFERENCE: C1037/7025 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/10/017,995
; CURRENT FILING DATE: 2001-12-18
; PRIOR APPLICATION NUMBER: US 60/255,534
; PRIOR FILING DATE: 2000-12-14
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 775
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-10-017-995-775

Query Match 100.0%; Score 20; DB 5; Length 20;
Best Local Similarity 100.0%; Pred. No. 11;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGCCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGCCGGTCCTGATGCT 20

RESULT 14
US-10-300-247-36
; Sequence 36, Application US/10300247
; Publication No. US20030091599A1
; GENERAL INFORMATION:
; APPLICANT: Davis, Heather L.
; APPLICANT: Schorr, Joachim
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Use of Nucleic Acids Containing
; TITLE OF INVENTION: Unmethylated CpG Dinucleotide as an Adjuvant
; FILE REFERENCE: C1039/7058/HCL
; CURRENT APPLICATION NUMBER: US/10/300,247
; CURRENT FILING DATE: 2002-11-20
; PRIOR APPLICATION NUMBER: US 09/325,193
; PRIOR FILING DATE: 1999-06-03
; PRIOR APPLICATION NUMBER: US 09/154,614
; PRIOR FILING DATE: 1998-09-16
; PRIOR APPLICATION NUMBER: PCT/US98/04703
; PRIOR FILING DATE: 1998-03-10
; PRIOR APPLICATION NUMBER: US 60/040,376
; PRIOR FILING DATE: 1997-03-10
; NUMBER OF SEQ ID NOS: 98
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 36
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence

; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-300-247-36

Query Match 100.0%; Score 20; DB 5; Length 20;
Best Local Similarity 100.0%; Pred. No. 11;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGCCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGCCGGTCCTGATGCT 20

RESULT 15
US-10-161-229-38
; Sequence 38, Application US/10161229
; Publication No. US20030100527A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Hartmann, Gunther
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules for
; TITLE OF INVENTION: Activating Dendritic Cells
; FILE REFERENCE: C01039/70061
; CURRENT APPLICATION NUMBER: US/10/161,229
; CURRENT FILING DATE: 2002-06-03
; PRIOR APPLICATION NUMBER: US 09/191,170
; PRIOR FILING DATE: 1998-11-13
; PRIOR APPLICATION NUMBER: US 08/960,774
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 99
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 38
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-161-229-38

Query Match 100.0%; Score 20; DB 5; Length 20;
Best Local Similarity 100.0%; Pred. No. 11;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGCCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGCCGGTCCTGATGCT 20

Search completed: April 17, 2006, 20:43:34
Job time : 366.5 secs

GenCore version 5.1.7

OM nucleic - nucleic search, using sw model

Run on: April 17, 2006, 17:33:01 ; Search time 425 Seconds
(without alignments)
189.545 Million cell updates/sec

Title: US-09-818-918-38
Perfect score: 20
Sequence: 1 tccatgccggtcctgatgct 20

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 9281099 seqs, 2013915447 residues

Total number of hits satisfying chosen parameters: 18562198

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_NA_New:*
1: /SIDS5/ptodata/1/pubpna/US08_NEW_PUB.seq:*
2: /SIDS5/ptodata/1/pubpna/US06_NEW_PUB.seq:*
3: /SIDS5/ptodata/1/pubpna/US07_NEW_PUB.seq:*
4: /SIDS5/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
5: /SIDS5/ptodata/1/pubpna/US09_NEW_PUB.seq:*
6: /SIDS5/ptodata/1/pubpna/US09_NEW_PUB.seq1:*
7: /SIDS5/ptodata/1/pubpna/US10_NEW_PUB.seq:*
8: /SIDS5/ptodata/1/pubpna/US10_NEW_PUB.seq1:*
9: /SIDS5/ptodata/1/pubpna/US10_NEW_PUB.seq2:*
10: /SIDS5/ptodata/1/pubpna/US10_NEW_PUB.seq3:*
11: /SIDS5/ptodata/1/pubpna/US11_NEW_PUB.seq:*
12: /SIDS5/ptodata/1/pubpna/US11_NEW_PUB.seq2:*
13: /SIDS5/ptodata/1/pubpna/US11_NEW_PUB.seq3:*
14: /SIDS5/ptodata/1/pubpna/US11_NEW_PUB.seq4:*
15: /SIDS5/ptodata/1/pubpna/US60_NEW_PUB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	20	100.0	20	8	US-10-619-279-33	Sequence 33, Appl
2	20	100.0	20	8	US-10-435-656-38	Sequence 38, Appl
3	20	100.0	20	10	US-10-382-822-33	Sequence 33, Appl
4	20	100.0	20	14	US-11-127-654-748	Sequence 748, App
5	20	100.0	20	14	US-11-134-918-38	Sequence 38, Appl
6	20	100.0	20	14	US-11-031-460-38	Sequence 38, Appl
7	20	100.0	20	14	US-11-067-587-38	Sequence 38, Appl
8	20	100.0	20	14	US-11-099-683-85	Sequence 85, Appl
9	20	100.0	20	14	US-11-099-683-86	Sequence 86, Appl
10	18.4	92.0	20	8	US-10-619-279-28	Sequence 28, Appl
11	18.4	92.0	20	8	US-10-619-279-29	Sequence 29, Appl
12	18.4	92.0	20	8	US-10-619-279-34	Sequence 34, Appl
13	18.4	92.0	20	8	US-10-619-279-35	Sequence 35, Appl
14	18.4	92.0	20	8	US-10-435-656-31	Sequence 31, Appl
15	18.4	92.0	20	8	US-10-435-656-32	Sequence 32, Appl
16	18.4	92.0	20	8	US-10-435-656-33	Sequence 33, Appl
17	18.4	92.0	20	8	US-10-435-656-34	Sequence 34, Appl
18	18.4	92.0	20	8	US-10-435-656-37	Sequence 37, Appl
19	18.4	92.0	20	8	US-10-435-656-39	Sequence 39, Appl
20	18.4	92.0	20	8	US-10-435-656-40	Sequence 40, Appl
21	18.4	92.0	20	10	US-10-382-822-28	Sequence 28, Appl
22	18.4	92.0	20	10	US-10-382-822-29	Sequence 29, Appl
23	18.4	92.0	20	10	US-10-382-822-34	Sequence 34, Appl
24	18.4	92.0	20	10	US-10-382-822-35	Sequence 35, Appl
25	18.4	92.0	20	12	US-11-127-797-21	Sequence 21, Appl
26	18.4	92.0	20	12	US-11-127-797-22	Sequence 22, Appl
27	18.4	92.0	20	12	US-11-127-803-21	Sequence 21, Appl
28	18.4	92.0	20	12	US-11-127-803-22	Sequence 22, Appl
29	18.4	92.0	20	12	US-11-128-127-21	Sequence 21, Appl
30	18.4	92.0	20	12	US-11-128-127-22	Sequence 22, Appl
31	18.4	92.0	20	14	US-11-127-654-377	Sequence 377, App
C 32	18.4	92.0	20	14	US-11-127-654-383	Sequence 383, App
C 33	18.4	92.0	20	14	US-11-127-654-444	Sequence 444, App
34	18.4	92.0	20	14	US-11-127-654-550	Sequence 550, App
35	18.4	92.0	20	14	US-11-127-654-711	Sequence 711, App
36	18.4	92.0	20	14	US-11-127-654-727	Sequence 727, App
37	18.4	92.0	20	14	US-11-127-654-728	Sequence 728, App
38	18.4	92.0	20	14	US-11-127-654-735	Sequence 735, App
39	18.4	92.0	20	14	US-11-127-654-736	Sequence 736, App
40	18.4	92.0	20	14	US-11-127-654-946	Sequence 946, App
41	18.4	92.0	20	14	US-11-134-918-31	Sequence 31, Appl
42	18.4	92.0	20	14	US-11-134-918-32	Sequence 32, Appl
43	18.4	92.0	20	14	US-11-134-918-33	Sequence 33, Appl
44	18.4	92.0	20	14	US-11-134-918-34	Sequence 34, Appl
45	18.4	92.0	20	14	US-11-134-918-37	Sequence 37, Appl

ALIGNMENTS

RESULT 1
US-10-619-279-33
; Sequence 33, Application US/10619279
; Publication No. US20050267057A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7023/HCL
; CURRENT APPLICATION NUMBER: US/10/619,279
; CURRENT FILING DATE: 2003-07-14
; PRIOR APPLICATION NUMBER: US 08/960,774
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 123
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 33
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-619-279-33

Query Match 100.0%; Score 20; DB 8; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.7;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGCCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGCCGGTCCTGATGCT 20

RESULT 2
US-10-435-656-38
; Sequence 38, Application US/10435656
; Publication No. US20050277604A1

```
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Kline, Joel N.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7048 (AWS)
;  CURRENT APPLICATION NUMBER: US/10/435,656
;  CURRENT FILING DATE:  2003-05-09
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  NUMBER OF SEQ ID NOS: 56
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 38
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-10-435-656-38

  Query Match             100.0%;  Score 20;  DB 8;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 2.7;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGCCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGCCGGTCCTGATGCT 20


RESULT 3
US-10-382-822-33
; Sequence 33, Application US/10382822
; Publication No. US20060058251A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: Methods for Treating and Preventing
;  TITLE OF INVENTION:  Infectious Disease
;  FILE REFERENCE: C01039.70062.US
;  CURRENT APPLICATION NUMBER: US/10/382,822
;  CURRENT FILING DATE:  2003-03-06
;  PRIOR APPLICATION NUMBER: US 09/630,319
;  PRIOR FILING DATE: 2000-07-31
;  PRIOR APPLICATION NUMBER: US 08/960,774
;  PRIOR FILING DATE: 1997-10-30
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  NUMBER OF SEQ ID NOS: 124
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 33
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Oligonucleotide
US-10-382-822-33

  Query Match             100.0%;  Score 20;  DB 10;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 2.7;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGCCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGCCGGTCCTGATGCT 20


RESULT 4
US-11-127-654-748
; Sequence 748, Application US/11127654
; Publication No. US20050250726A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Berg, Daniel J.
;  TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
;  TITLE OF INVENTION:  INFLAMMATORY DISEASES
;  FILE REFERENCE: C1039.70060US01
;  CURRENT APPLICATION NUMBER: US/11/127,654
;  CURRENT FILING DATE:  2005-05-12
;  PRIOR APPLICATION NUMBER: US 10/112,653
;  PRIOR FILING DATE: 2002-03-29
;  PRIOR APPLICATION NUMBER: US 60/279,642
;  PRIOR FILING DATE: 2001-03-29
;  NUMBER OF SEQ ID NOS: 1040
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 748
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-11-127-654-748

  Query Match             100.0%;  Score 20;  DB 14;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 2.7;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGCCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGCCGGTCCTGATGCT 20


RESULT 5
US-11-134-918-38
; Sequence 38, Application US/11134918
; Publication No. US20050267064A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Kline, Joel N.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7048 (AWS)
;  CURRENT APPLICATION NUMBER: US/11/134,918
;  CURRENT FILING DATE:  2005-05-23
;  PRIOR APPLICATION NUMBER: US/09/818,918
;  PRIOR FILING DATE: 2001-03-27
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  NUMBER OF SEQ ID NOS: 56
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 38
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-11-134-918-38

  Query Match             100.0%;  Score 20;  DB 14;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 2.7;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;
```

```
Qy          1 TCCATGCCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGCCGGTCCTGATGCT 20


RESULT 6
US-11-031-460-38
; Sequence 38, Application US/11031460
; Publication No. US20050277609A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Kline, Joel N.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7048 (AWS)
;  CURRENT APPLICATION NUMBER: US/11/031,460
;  CURRENT FILING DATE:  2005-01-07
;  PRIOR APPLICATION NUMBER: US/09/818,918
;  PRIOR FILING DATE: 2001-03-27
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  NUMBER OF SEQ ID NOS: 56
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 38
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-11-031-460-38

  Query Match             100.0%;  Score 20;  DB 14;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 2.7;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGCCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGCCGGTCCTGATGCT 20


RESULT 7
US-11-067-587-38
; Sequence 38, Application US/11067587
; Publication No. US20060003955A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Kline, Joel N.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7048 (AWS)
;  CURRENT APPLICATION NUMBER: US/11/067,587
;  CURRENT FILING DATE:  2005-02-25
;  PRIOR APPLICATION NUMBER: US/09/818,918
;  PRIOR FILING DATE: 2001-03-27
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  NUMBER OF SEQ ID NOS: 56
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 38
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-11-067-587-38

  Query Match             100.0%;  Score 20;  DB 14;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 2.7;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGCCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGCCGGTCCTGATGCT 20


RESULT 8
US-11-099-683-85
; Sequence 85, Application US/11099683
; Publication No. US20060019916A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur
;  APPLICANT:  Vollmer, Jorg
;  TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACIDS FOR INDUCING IL-10 RESPONSES
;  FILE REFERENCE: C1037.70047US01
;  CURRENT APPLICATION NUMBER: US/11/099,683
;  CURRENT FILING DATE:  2005-04-04
;  PRIOR APPLICATION NUMBER: US 60/558,951
;  PRIOR FILING DATE: 2004-04-02
;  NUMBER OF SEQ ID NOS: 143
;  SOFTWARE: PatentIn version 3.3
; SEQ ID NO 85
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-11-099-683-85

  Query Match             100.0%;  Score 20;  DB 14;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 2.7;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGCCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGCCGGTCCTGATGCT 20


RESULT 9
US-11-099-683-86
; Sequence 86, Application US/11099683
; Publication No. US20060019916A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur
;  APPLICANT:  Vollmer, Jorg
;  TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACIDS FOR INDUCING IL-10 RESPONSES
;  FILE REFERENCE: C1037.70047US01
;  CURRENT APPLICATION NUMBER: US/11/099,683
;  CURRENT FILING DATE:  2005-04-04
;  PRIOR APPLICATION NUMBER: US 60/558,951
;  PRIOR FILING DATE: 2004-04-02
;  NUMBER OF SEQ ID NOS: 143
;  SOFTWARE: PatentIn version 3.3
; SEQ ID NO 86
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-11-099-683-86

  Query Match             100.0%;  Score 20;  DB 14;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 2.7;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGCCGGTCCTGATGCT 20
              ||||||||||||||||||||
```

```
Db          1 TCCATGCCGGTCCTGATGCT 20


RESULT 10
US-10-619-279-28
; Sequence 28, Application US/10619279
; Publication No. US20050267057A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7023/HCL
;  CURRENT APPLICATION NUMBER: US/10/619,279
;  CURRENT FILING DATE:  2003-07-14
;  PRIOR APPLICATION NUMBER: US 08/960,774
;  PRIOR FILING DATE: 1997-10-30
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  NUMBER OF SEQ ID NOS: 123
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 28
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Oligonucleotide
US-10-619-279-28

  Query Match             92.0%;  Score 18.4;  DB 8;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 16;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGCCGGTCCTGATGCT 20
              |||||| ||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 11
US-10-619-279-29
; Sequence 29, Application US/10619279
; Publication No. US20050267057A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7023/HCL
;  CURRENT APPLICATION NUMBER: US/10/619,279
;  CURRENT FILING DATE:  2003-07-14
;  PRIOR APPLICATION NUMBER: US 08/960,774
;  PRIOR FILING DATE: 1997-10-30
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  NUMBER OF SEQ ID NOS: 123
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 29
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Oligonucleotide
US-10-619-279-29

  Query Match             92.0%;  Score 18.4;  DB 8;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 16;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGCCGGTCCTGATGCT 20
              ||||||| ||||||||||||
Db          1 TCCATGCTGGTCCTGATGCT 20


RESULT 12
US-10-619-279-34
; Sequence 34, Application US/10619279
; Publication No. US20050267057A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7023/HCL
;  CURRENT APPLICATION NUMBER: US/10/619,279
;  CURRENT FILING DATE:  2003-07-14
;  PRIOR APPLICATION NUMBER: US 08/960,774
;  PRIOR FILING DATE: 1997-10-30
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  NUMBER OF SEQ ID NOS: 123
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 34
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Oligonucleotide
US-10-619-279-34

  Query Match             92.0%;  Score 18.4;  DB 8;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 16;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGCCGGTCCTGATGCT 20
              |||||| ||||||||||||
Db          1 TCCATGGCGGTCCTGATGCT 20


RESULT 13
US-10-619-279-35
; Sequence 35, Application US/10619279
; Publication No. US20050267057A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7023/HCL
;  CURRENT APPLICATION NUMBER: US/10/619,279
;  CURRENT FILING DATE:  2003-07-14
;  PRIOR APPLICATION NUMBER: US 08/960,774
;  PRIOR FILING DATE: 1997-10-30
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  NUMBER OF SEQ ID NOS: 123
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 35
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Oligonucleotide
US-10-619-279-35

  Query Match             92.0%;  Score 18.4;  DB 8;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 16;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;
```

```
Qy          1 TCCATGCCGGTCCTGATGCT 20
              |||||| ||||||||||||||
Db          1 TCCATGACGGTCCTGATGCT 20
```

RESULT 14
US-10-435-656-31
; Sequence 31, Application US/10435656
; Publication No. US20050277604A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AWS)
; CURRENT APPLICATION NUMBER: US/10/435,656
; CURRENT FILING DATE: 2003-05-09
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 31
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-10-435-656-31

```
  Query Match             92.0%;  Score 18.4;  DB 8;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 16;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGCCGGTCCTGATGCT 20
              |||||| ||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20
```

RESULT 15
US-10-435-656-32
; Sequence 32, Application US/10435656
; Publication No. US20050277604A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AWS)
; CURRENT APPLICATION NUMBER: US/10/435,656
; CURRENT FILING DATE: 2003-05-09
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 32
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-10-435-656-32

```
  Query Match             92.0%;  Score 18.4;  DB 8;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 16;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGCCGGTCCTGATGCT 20
              ||||||| ||||||||||||
Db          1 TCCATGCTGGTCCTGATGCT 20
```

Search completed: April 17, 2006, 18:51:09
Job time : 425.125 secs

GenCore version 5.1.7

OM nucleic - nucleic search, using sw model

Run on: April 17, 2006, 14:43:57 ; Search time 56.375 Seconds
(without alignments)
630.621 Million cell updates/sec

Title: US-09-818-918-39
Perfect score: 20
Sequence: 1 tccatggcggtcctgatgct 20

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 1303057 seqs, 888780828 residues

Total number of hits satisfying chosen parameters: 2606114

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_NA:*
1: /cgn2_6/ptodata/1/ina/1_COMB.seq:*
2: /cgn2_6/ptodata/1/ina/5_COMB.seq:*
3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/1/ina/H_COMB.seq:*
6: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
7: /cgn2_6/ptodata/1/ina/PP_COMB.seq:*
8: /cgn2_6/ptodata/1/ina/RE_COMB.seq:*
9: /cgn2_6/ptodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	20	100.0	20	3	US-08-738-652-39	Sequence 39, Appl
2	20	100.0	20	3	US-09-286-098-44	Sequence 44, Appl
3	20	100.0	20	3	US-08-960-774-34	Sequence 34, Appl
4	20	100.0	20	3	US-09-325-193A-37	Sequence 37, Appl
5	20	100.0	20	3	US-09-191-170-39	Sequence 39, Appl
6	20	100.0	20	3	US-09-337-619-34	Sequence 34, Appl
7	20	100.0	20	3	US-09-954-987B-90	Sequence 90, Appl
8	20	100.0	20	3	US-09-672-126B-88	Sequence 88, Appl
9	18.4	92.0	20	2	US-08-436-714-7	Sequence 7, Appli
10	18.4	92.0	20	2	US-08-442-705-7	Sequence 7, Appli
11	18.4	92.0	20	2	US-08-332-829-7	Sequence 7, Appli
12	18.4	92.0	20	3	US-08-386-063-21	Sequence 21, Appl
13	18.4	92.0	20	3	US-08-386-063-21	Sequence 21, Appl
14	18.4	92.0	20	3	US-08-738-652-31	Sequence 31, Appl
15	18.4	92.0	20	3	US-08-738-652-33	Sequence 33, Appl
16	18.4	92.0	20	3	US-08-738-652-34	Sequence 34, Appl
17	18.4	92.0	20	3	US-08-738-652-37	Sequence 37, Appl
18	18.4	92.0	20	3	US-08-738-652-38	Sequence 38, Appl
19	18.4	92.0	20	3	US-08-738-652-40	Sequence 40, Appl
20	18.4	92.0	20	3	US-09-286-098-22	Sequence 22, Appl
21	18.4	92.0	20	3	US-09-286-098-23	Sequence 23, Appl
22	18.4	92.0	20	3	US-09-286-098-42	Sequence 42, Appl
23	18.4	92.0	20	3	US-09-286-098-43	Sequence 43, Appl
24	18.4	92.0	20	3	US-09-286-098-45	Sequence 45, Appl
25	18.4	92.0	20	3	US-08-960-774-28	Sequence 28, Appl
26	18.4	92.0	20	3	US-08-960-774-33	Sequence 33, Appl
27	18.4	92.0	20	3	US-08-960-774-35	Sequence 35, Appl
28	18.4	92.0	20	3	US-08-960-774-101	Sequence 101, App
29	18.4	92.0	20	3	US-08-960-774-102	Sequence 102, App
30	18.4	92.0	20	3	US-09-325-193A-17	Sequence 17, Appl
31	18.4	92.0	20	3	US-09-325-193A-18	Sequence 18, Appl
32	18.4	92.0	20	3	US-09-325-193A-35	Sequence 35, Appl
33	18.4	92.0	20	3	US-09-325-193A-36	Sequence 36, Appl
34	18.4	92.0	20	3	US-09-325-193A-38	Sequence 38, Appl
35	18.4	92.0	20	3	US-09-191-170-20	Sequence 20, Appl
36	18.4	92.0	20	3	US-09-191-170-22	Sequence 22, Appl
37	18.4	92.0	20	3	US-09-191-170-23	Sequence 23, Appl
38	18.4	92.0	20	3	US-09-191-170-38	Sequence 38, Appl
39	18.4	92.0	20	3	US-09-191-170-40	Sequence 40, Appl
40	18.4	92.0	20	3	US-09-337-619-28	Sequence 28, Appl
41	18.4	92.0	20	3	US-09-337-619-33	Sequence 33, Appl
42	18.4	92.0	20	3	US-09-337-619-35	Sequence 35, Appl
43	18.4	92.0	20	3	US-09-954-987B-80	Sequence 80, Appl
44	18.4	92.0	20	3	US-09-954-987B-86	Sequence 86, Appl
45	18.4	92.0	20	3	US-09-954-987B-93	Sequence 93, Appl

ALIGNMENTS

RESULT 1
US-08-738-652-39
; Sequence 39, Application US/08738652B
; Patent No. 6207646
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7004 HCL
; CURRENT APPLICATION NUMBER: US/08/738,652B
; CURRENT FILING DATE: 1996-10-30
; EARLIER APPLICATION NUMBER: US 08/276,358
; EARLIER FILING DATE: 1994-07-15
; EARLIER APPLICATION NUMBER: US 08/386,063
; EARLIER FILING DATE: 1995-02-07
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 39
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-08-738-652-39

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 6;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGGCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGGCGGTCCTGATGCT 20

RESULT 2
US-09-286-098-44
; Sequence 44, Application US/09286098
; Patent No. 6218371
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Weiner, George
; TITLE OF INVENTION: Methods and Products for Stimulating the
; TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
; TITLE OF INVENTION: Cytokines
; FILE REFERENCE: C1039/7026/HCL
; CURRENT APPLICATION NUMBER: US/09/286,098
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,729

```
;  EARLIER FILING DATE: 1998-04-03
;  NUMBER OF SEQ ID NOS: 105
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 44
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Sequence
US-09-286-098-44

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 6;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGGCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGGCGGTCCTGATGCT 20


RESULT 3
US-08-960-774-34
; Sequence 34, Application US/08960774
; Patent No. 6239116
;  GENERAL INFORMATION:
;    APPLICANT:  Krieg et al.,
;    TITLE OF INVENTION:  IMMUNOSTIMULATORY NUCLEIC ACID MOLECULES
;    NUMBER OF SEQUENCES:  111
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Fish & Richardson P.C.
;      STREET:  4225 Executive Square, Suite 1400
;      CITY:  La Jolla
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  92037
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  ASCII text
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/960,774
;      FILING DATE:  30-October-1997
;      CLASSIFICATION:  514
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  U.S. Serial No. 6239116  08/738,652
;      FILING DATE:  October 30, 1996
;      CLASSIFICATION:  514
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Haile, Lisa A.
;      REGISTRATION NUMBER:  38,347
;      REFERENCE/DOCKET NUMBER:  08918/012001
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  619/678-5070
;      TELEFAX:  619/678-5099
;  INFORMATION FOR SEQ ID NO:  34:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
US-08-960-774-34

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 6;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGGCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGGCGGTCCTGATGCT 20


RESULT 4
US-09-325-193A-37
; Sequence 37, Application US/09325193A
; Patent No. 6406705
; GENERAL INFORMATION:
;  APPLICANT:  Davis, Heather L.
;  APPLICANT:  Schorr, Joachim
;  APPLICANT:  Krieg, Arthur M.
;  TITLE OF INVENTION:  Use of Nucleic Acids Containing
;  TITLE OF INVENTION:  Unmethylated CpG Dinucleotide as an Adjuvant
;  FILE REFERENCE:  C1039/7025/HCL
;  CURRENT APPLICATION NUMBER: US/09/325,193A
;  CURRENT FILING DATE:  1999-06-03
;  PRIOR APPLICATION NUMBER:  US 09/154,614
;  PRIOR FILING DATE:  1998-09-16
;  PRIOR APPLICATION NUMBER:  PCT/US98/04703
;  PRIOR FILING DATE:  1998-03-10
;  PRIOR APPLICATION NUMBER:  US 60/040,376
;  PRIOR FILING DATE:  1997-03-10
;  NUMBER OF SEQ ID NOS:  98
;  SOFTWARE:  FastSEQ for Windows Version 3.0
; SEQ ID NO 37
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Oligonucleotide
US-09-325-193A-37

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 6;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGGCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGGCGGTCCTGATGCT 20


RESULT 5
US-09-191-170-39
; Sequence 39, Application US/09191170
; Patent No. 6429199
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT: Hartmann, Gunther
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  TITLE OF INVENTION: for Activating Dendritic Cells
;  FILE REFERENCE: C1039/7017
;  CURRENT APPLICATION NUMBER: US/09/191,170
;  CURRENT FILING DATE: 1998-11-13
;  EARLIER APPLICATION NUMBER: US 08/960,774
;  EARLIER FILING DATE: 1997-10-30
;  EARLIER APPLICATION NUMBER: US 08/738,652
;  EARLIER FILING DATE: 1996-10-30
;  EARLIER APPLICATION NUMBER: US 08/386,063
;  EARLIER FILING DATE: 1995-02-07
;  EARLIER APPLICATION NUMBER: US 08/276,358
;  EARLIER FILING DATE: 1994-07-15
;  NUMBER OF SEQ ID NOS: 99
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 39
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: synthetic oligonucleotide
US-09-191-170-39

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 6;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGGCGGTCCTGATGCT 20
```

```
                    ||||||||||||||||||||
Db          1 TCCATGGCGGTCCTGATGCT 20


RESULT 6
US-09-337-619-34
; Sequence 34, Application US/09337619
; Patent No. 6653292
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  TITLE OF INVENTION: Methods of Treating Cancer Using
;  TITLE OF INVENTION: Immunostimulatory Oligonucleotides
;  FILE REFERENCE: C1039/7021/HCL
;  CURRENT APPLICATION NUMBER: US/09/337,619
;  CURRENT FILING DATE: 1999-06-21
;  EARLIER APPLICATION NUMBER: US 08/960,774
;  EARLIER FILING DATE: 1997-10-30
;  EARLIER APPLICATION NUMBER: US 08/738,652
;  EARLIER FILING DATE: 1996-10-30
;  EARLIER APPLICATION NUMBER: US 08/386,063
;  EARLIER FILING DATE: 1995-02-07
;  EARLIER APPLICATION NUMBER: US 08/276,358
;  EARLIER FILING DATE: 1994-07-15
;  NUMBER OF SEQ ID NOS: 123
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 34
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Oligonucleotide
US-09-337-619-34

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 6;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGGCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGGCGGTCCTGATGCT 20


RESULT 7
US-09-954-987B-90
; Sequence 90, Application US/09954987B
; Patent No. 6943240
; GENERAL INFORMATION:
;  APPLICANT: Stefan Bauer
;  APPLICANT:  Grayson B. Lipford
;  APPLICANT:  Hermann Wagner
;  TITLE OF INVENTION: PROCESS FOR HIGH THROUGHPUT SCREENING OF
;  TITLE OF INVENTION:  CpG-BASED IMMUNO-AGONIST/ANTAGONIST
;  FILE REFERENCE: C1041/7016 (AWS)
;  CURRENT APPLICATION NUMBER: US/09/954,987B
;  CURRENT FILING DATE:  2001-09-17
;  PRIOR APPLICATION NUMBER: US 60/233,035
;  PRIOR FILING DATE: 2000-09-15
;  PRIOR APPLICATION NUMBER: US 60/263,657
;  PRIOR FILING DATE: 2001-01-23
;  PRIOR APPLICATION NUMBER: US 60/291,726
;  PRIOR FILING DATE: 2001-05-17
;  PRIOR APPLICATION NUMBER: US 60/300,210
;  PRIOR FILING DATE: 2001-06-22
;  NUMBER OF SEQ ID NOS: 230
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 90
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-09-954-987B-90

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 6;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGGCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGGCGGTCCTGATGCT 20


RESULT 8
US-09-672-126B-88
; Sequence 88, Application US/09672126B
; Patent No. 6949520
; GENERAL INFORMATION:
;  APPLICANT: Hartmann, Gunther
;  APPLICANT:  Bratzler, Robert L.
;  APPLICANT:  Krieg, Arthur
;  TITLE OF INVENTION: Methods Related to Immunostimulatory
;  TITLE OF INVENTION:  Nucleic Acid-Induced Interferon
;  FILE REFERENCE: C1039/7044
;  CURRENT APPLICATION NUMBER: US/09/672,126B
;  CURRENT FILING DATE:  2000-09-27
;  PRIOR APPLICATION NUMBER: 60/156,147
;  PRIOR FILING DATE: 1999-09-29
;  NUMBER OF SEQ ID NOS: 169
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 88
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Oligonucleotide
US-09-672-126B-88

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 6;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGGCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGGCGGTCCTGATGCT 20


RESULT 9
US-08-436-714-7
; Sequence 7, Application US/08436714
; Patent No. 5602244
;  GENERAL INFORMATION:
;    APPLICANT:  Marvin H. Caruthers et al
;    TITLE OF INVENTION:  Nucleoside and Polynucleotide
;    TITLE OF INVENTION:  Thiophosphoramidite and Phosphorodithioate Compounds and Proce
;    NUMBER OF SEQUENCES:  8
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Yahwak & Associates
;      STREET:  25 Skytop Drive
;      CITY:  Trumbull
;      STATE:  Connecticut
;      COUNTRY:  USA
;      ZIP:  06611
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  floppy disk
;      COMPUTER:  Macintosh
;      OPERATING SYSTEM:  MS-DOS
;      SOFTWARE:  Microsoft Word 4.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/436,714
;      FILING DATE:
;      CLASSIFICATION:  536
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  George M. Yahwak
;      REGISTRATION NUMBER:  26,824
;      REFERENCE/DOCKET NUMBER:  CU 311 BIGCIP
;    TELECOMMUNICATION INFORMATION:
```

```
;       TELEPHONE:  (203)268-1951
;       TELEFAX:  (203)268-1951
;   INFORMATION FOR SEQ ID NO:  7:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  20 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  DNA
US-08-436-714-7

  Query Match             92.0%;  Score 18.4;  DB 2;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 32;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGGCGGTCCTGATGCT 20
              |||||| ||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 10
US-08-442-705-7
; Sequence 7, Application US/08442705
; Patent No. 5684148
;  GENERAL INFORMATION:
;    APPLICANT:  Marvin H. Caruthers et al
;    TITLE OF INVENTION:  Nucleoside and Polynucleotide
;    TITLE OF INVENTION:  Thiophosphoramidite and Phosphorodithioate Compounds and Proce
;    NUMBER OF SEQUENCES:  8
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Yahwak & Associates
;      STREET:  25 Skytop Drive
;      CITY:  Trumbull
;      STATE:  Connecticut
;      COUNTRY:  USA
;      ZIP:  06611
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  floppy disk
;      COMPUTER:  Macintosh
;      OPERATING SYSTEM:  MS-DOS
;      SOFTWARE:  Microsoft Word 4.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/442,705
;      FILING DATE:
;      CLASSIFICATION:  536
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  George M. Yahwak
;      REGISTRATION NUMBER:  26,824
;      REFERENCE/DOCKET NUMBER:  CU 311 BIGCIP
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (203)268-1951
;      TELEFAX:  (203)268-1951
;  INFORMATION FOR SEQ ID NO:  7:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-442-705-7

  Query Match             92.0%;  Score 18.4;  DB 2;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 32;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGGCGGTCCTGATGCT 20
              |||||| ||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 11
US-08-332-829-7
; Sequence 7, Application US/08332829
; Patent No. 5750666
;  GENERAL INFORMATION:
;    APPLICANT:  Marvin H. Caruthers et al
;    TITLE OF INVENTION:  Nucleoside and Polynucleotide
;    TITLE OF INVENTION:  Thiophosphoramidite and Phosphorodithioate Compounds and Proce
;    NUMBER OF SEQUENCES:  8
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Yahwak & Associates
;      STREET:  25 Skytop Drive
;      CITY:  Trumbull
;      STATE:  Connecticut
;      COUNTRY:  USA
;      ZIP:  06611
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  floppy disk
;      COMPUTER:  Macintosh
;      OPERATING SYSTEM:  MS-DOS
;      SOFTWARE:  Microsoft Word 4.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/332,829
;      FILING DATE:
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  George M. Yahwak
;      REGISTRATION NUMBER:  26,824
;      REFERENCE/DOCKET NUMBER:  CU 311 BIGCIP
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (203)268-1951
;      TELEFAX:  (203)268-1951
;  INFORMATION FOR SEQ ID NO:  7:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-332-829-7

  Query Match             92.0%;  Score 18.4;  DB 2;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 32;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGGCGGTCCTGATGCT 20
              |||||| ||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 12
US-08-386-063-21
; Sequence 21, Application US/08386063
; Patent No. 6008200
;  GENERAL INFORMATION:
;    APPLICANT:  Arthur M. Krieg, M.D.
;    TITLE OF INVENTION:  IMMUNOMODULATORY OLIGONUCLEOTIDES
;    NUMBER OF SEQUENCES:  27
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  LAHIVE & COCKFIELD
;      STREET:  60 STATE STREET, SUITE 510
;      CITY:  BOSTON
;      STATE:  MASSACHUSETTS
;      COUNTRY:  USA
;      ZIP:  02109-1875
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  ASCII text
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/386,063
;      FILING DATE:
;      CLASSIFICATION:  424
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  ARNOLD, BETH E.
```

```
;       REGISTRATION NUMBER:  35,430
;       REFERENCE/DOCKET NUMBER:  UIZ-013CP
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (617)227-7400
;       TELEFAX:  (617)227-5941
;   INFORMATION FOR SEQ ID NO:  21:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  20 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  DNA
US-08-386-063-21

  Query Match             92.0%;  Score 18.4;  DB 3;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 32;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGGCGGTCCTGATGCT 20
              |||||| ||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 13
US-08-386-063-21
; Sequence 21, Application US/08386063
; Patent No. 6194388
;  GENERAL INFORMATION:
;     APPLICANT:  Arthur M. Krieg, M.D.
;     TITLE OF INVENTION:  IMMUNOMODULATORY OLIGONUCLEOTIDES
;     NUMBER OF SEQUENCES:  27
;     CORRESPONDENCE ADDRESS:
;       ADDRESSEE:  LAHIVE & COCKFIELD
;       STREET:  60 STATE STREET, SUITE 510
;       CITY:  BOSTON
;       STATE:  MASSACHUSETTS
;       COUNTRY:  USA
;       ZIP:  02109-1875
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  ASCII text
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/08/386,063
;       FILING DATE:
;       CLASSIFICATION:
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  ARNOLD, BETH E.
;       REGISTRATION NUMBER:  35,430
;       REFERENCE/DOCKET NUMBER:  UIZ-013CP
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (617)227-7400
;       TELEFAX:  (617)227-5941
;   INFORMATION FOR SEQ ID NO:  21:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  20 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  DNA
US-08-386-063-21

  Query Match             92.0%;  Score 18.4;  DB 3;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 32;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGGCGGTCCTGATGCT 20
              |||||| ||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 14
US-08-738-652-31
; Sequence 31, Application US/08738652B
; Patent No. 6207646
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7004 HCL
;  CURRENT APPLICATION NUMBER: US/08/738,652B
;  CURRENT FILING DATE: 1996-10-30
;  EARLIER APPLICATION NUMBER: US 08/276,358
;  EARLIER FILING DATE: 1994-07-15
;  EARLIER APPLICATION NUMBER: US 08/386,063
;  EARLIER FILING DATE: 1995-02-07
;  NUMBER OF SEQ ID NOS: 55
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 31
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-08-738-652-31

  Query Match             92.0%;  Score 18.4;  DB 3;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 32;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGGCGGTCCTGATGCT 20
              |||||| ||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 15
US-08-738-652-33
; Sequence 33, Application US/08738652B
; Patent No. 6207646
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7004 HCL
;  CURRENT APPLICATION NUMBER: US/08/738,652B
;  CURRENT FILING DATE: 1996-10-30
;  EARLIER APPLICATION NUMBER: US 08/276,358
;  EARLIER FILING DATE: 1994-07-15
;  EARLIER APPLICATION NUMBER: US 08/386,063
;  EARLIER FILING DATE: 1995-02-07
;  NUMBER OF SEQ ID NOS: 55
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 33
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
;   FEATURE:
;   NAME/KEY: modified_base
;   LOCATION: (8)...(8)
;   OTHER INFORMATION: m5c
US-08-738-652-33

  Query Match             92.0%;  Score 18.4;  DB 3;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 32;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGGCGGTCCTGATGCT 20
              |||||| ||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


Search completed: April 17, 2006, 18:04:52
Job time : 56.375 secs
```

GenCore version 5.1.7

OM nucleic - nucleic search, using sw model

Run on: April 17, 2006, 17:32:13 ; Search time 366.375 Seconds
(without alignments)
451.416 Million cell updates/sec

Title: US-09-818-918-39
Perfect score: 20
Sequence: 1 tccatggcggtcctgatgct 20

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 9793542 seqs, 4134689005 residues

Total number of hits satisfying chosen parameters: 19587084

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_NA_Main:*
1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
2: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
3: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*
4: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:*
5: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
6: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
7: /cgn2_6/ptodata/1/pubpna/US10C_PUBCOMB.seq:*
8: /cgn2_6/ptodata/1/pubpna/US10D_PUBCOMB.seq:*
9: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq:*
10: /cgn2_6/ptodata/1/pubpna/US11_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	20	100.0	20	3	US-09-824-468-44	Sequence 44, Appl
2	20	100.0	20	3	US-09-800-266A-37	Sequence 37, Appl
3	20	100.0	20	3	US-09-895-007A-37	Sequence 37, Appl
4	20	100.0	20	3	US-09-920-313-37	Sequence 37, Appl
5	20	100.0	20	3	US-09-888-326-595	Sequence 595, App
6	20	100.0	20	3	US-09-818-918-39	Sequence 39, Appl
7	20	100.0	20	3	US-09-931-583-51	Sequence 51, Appl
8	20	100.0	20	3	US-09-776-479-755	Sequence 755, App
9	20	100.0	20	3	US-09-954-987B-90	Sequence 90, Appl
10	20	100.0	20	3	US-09-874-991C-39	Sequence 39, Appl
11	20	100.0	20	3	US-09-874-991C-105	Sequence 105, App
12	20	100.0	20	3	US-09-874-991C-128	Sequence 128, App
13	20	100.0	20	3	US-09-874-991C-156	Sequence 156, App
14	20	100.0	20	3	US-09-874-991C-177	Sequence 177, App
15	20	100.0	20	3	US-09-874-991C-202	Sequence 202, App
16	20	100.0	20	3	US-09-874-991C-418	Sequence 418, App
17	20	100.0	20	3	US-09-874-991C-437	Sequence 437, App
18	20	100.0	20	3	US-09-776-479-755	Sequence 755, App
19	20	100.0	20	5	US-10-023-909A-37	Sequence 37, Appl
20	20	100.0	20	5	US-10-112-653-728	Sequence 728, App
21	20	100.0	20	5	US-10-017-995-755	Sequence 755, App
22	20	100.0	20	5	US-10-300-247-37	Sequence 37, Appl
23	20	100.0	20	5	US-10-161-229-39	Sequence 39, Appl
24	20	100.0	20	6	US-10-187-264A-34	Sequence 34, Appl
25	20	100.0	20	6	US-10-265-072-88	Sequence 88, Appl
26	20	100.0	20	6	US-10-306-522-34	Sequence 34, Appl
27	20	100.0	20	6	US-10-314-578-755	Sequence 755, App
28	20	100.0	20	6	US-10-434-696-37	Sequence 37, Appl
29	20	100.0	20	7	US-10-373-381-32	Sequence 32, Appl
30	20	100.0	20	7	US-10-719-493-34	Sequence 34, Appl
31	20	100.0	20	7	US-10-627-331-34	Sequence 34, Appl
32	20	100.0	20	7	US-10-666-733-37	Sequence 37, Appl
33	20	100.0	20	7	US-10-743-625-39	Sequence 39, Appl
34	20	100.0	20	7	US-10-679-710-39	Sequence 39, Appl
35	20	100.0	20	7	US-10-769-282-39	Sequence 39, Appl
36	20	100.0	20	8	US-10-817-165-39	Sequence 39, Appl
37	20	100.0	20	8	US-10-877-407-43	Sequence 43, Appl
38	20	100.0	20	8	US-10-877-369-32	Sequence 32, Appl
39	20	100.0	20	8	US-10-816-220-37	Sequence 37, Appl
40	20	100.0	20	8	US-10-831-778-755	Sequence 755, App
41	20	100.0	20	8	US-10-876-892-32	Sequence 32, Appl
42	20	100.0	20	8	US-10-876-965-32	Sequence 32, Appl
43	20	100.0	20	8	US-10-888-886-37	Sequence 37, Appl
44	20	100.0	20	8	US-10-847-642-39	Sequence 39, Appl
45	20	100.0	20	8	US-10-888-785-39	Sequence 39, Appl

ALIGNMENTS

RESULT 1
US-09-824-468-44
; Sequence 44, Application US/09824468
; Patent No. US20020064515A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Weiner, George
; TITLE OF INVENTION: Methods and Products for Stimulating the
; TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
; TITLE OF INVENTION: Cytokines
; FILE REFERENCE: C1039/7026/HCL
; CURRENT APPLICATION NUMBER: US/09/824,468
; CURRENT FILING DATE: 2001-04-02
; PRIOR APPLICATION NUMBER: 09/286,098
; PRIOR FILING DATE: 1999-04-02
; NUMBER OF SEQ ID NOS: 105
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 44
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-824-468-44

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 14;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGGCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGGCGGTCCTGATGCT 20

RESULT 2
US-09-800-266A-37
; Sequence 37, Application US/09800266A
; Patent No. US20020156033A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids and
; TITLE OF INVENTION: Cancer Medicament Combination Therapy for the Treatment of
; TITLE OF INVENTION: Cancer
; FILE REFERENCE: C1037/7017(HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/800,266A

; CURRENT FILING DATE: 2001-03-05
; PRIOR APPLICATION NUMBER: US 60/187,214
; PRIOR FILING DATE: 2000-03-03
; NUMBER OF SEQ ID NOS: 146
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 37
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-800-266A-37

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 14;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGGCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGGCGGTCCTGATGCT 20

RESULT 3
US-09-895-007A-37
; Sequence 37, Application US/09895007A
; Patent No. US20020165178A1
; GENERAL INFORMATION:
; APPLICANT: Schetter, Christian
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACIDS FOR THE
; TITLE OF INVENTION: TREATMENT OF ANEMIA, THROMBOCYTOPENIA, AND NEUTROPENIA
; FILE REFERENCE: C1041/7014 (AWS)
; CURRENT APPLICATION NUMBER: US/09/895,007A
; CURRENT FILING DATE: 2001-06-28
; PRIOR APPLICATION NUMBER: US 60/214,368
; PRIOR FILING DATE: 2000-06-28
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 37
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-09-895-007A-37

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 14;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGGCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGGCGGTCCTGATGCT 20

RESULT 4
US-09-920-313-37
; Sequence 37, Application US/09920313
; Publication No. US20020198165A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; TITLE OF INVENTION: Nucleic Acids for the Prevention and
; TITLE OF INVENTION: Treatment of Gastric Ulcers
; FILE REFERENCE: C1037/7019 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/920,313
; CURRENT FILING DATE: 2001-08-01
; PRIOR APPLICATION NUMBER: US 60/222,248
; PRIOR FILING DATE: 2001-08-08
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 37
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-920-313-37

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 14;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGGCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGGCGGTCCTGATGCT 20

RESULT 5
US-09-888-326-595
; Sequence 595, Application US/09888326
; Publication No. US20030026801A1
; GENERAL INFORMATION:
; APPLICANT: Weiner, George
; APPLICANT: Hartmann, Gunther
; TITLE OF INVENTION: Methods for Enhancing Antibody-Induced
; TITLE OF INVENTION: Cell Lysis and Treating Cancer
; FILE REFERENCE: C1039/7052 (AWS)
; CURRENT APPLICATION NUMBER: US/09/888,326
; CURRENT FILING DATE: 2001-06-22
; PRIOR APPLICATION NUMBER: US 60/213,346
; PRIOR FILING DATE: 2000-06-22
; NUMBER OF SEQ ID NOS: 848
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 595
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
; NAME/KEY: misc_feature
; LOCATION: (0)...(0)
; OTHER INFORMATION: phosphodiester backbone
US-09-888-326-595

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 14;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGGCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGGCGGTCCTGATGCT 20

RESULT 6
US-09-818-918-39
; Sequence 39, Application US/09818918
; Publication No. US20030050261A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AWS)
; CURRENT APPLICATION NUMBER: US/09/818,918
; CURRENT FILING DATE: 2001-03-27
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSEQ for Windows Version 3.0

; SEQ ID NO 39
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-09-818-918-39

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 14;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGGCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGGCGGTCCTGATGCT 20

RESULT 7
US-09-931-583-51
; Sequence 51, Application US/09931583
; Publication No. US20030050263A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred
; TITLE OF INVENTION: Methods and Products for Treating HIV Infection
; FILE REFERENCE: C1039/7053(HCL)
; CURRENT APPLICATION NUMBER: US/09/931,583
; CURRENT FILING DATE: 2001-08-16
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 09/415,142
; PRIOR FILING DATE: 1999-10-09
; NUMBER OF SEQ ID NOS: 75
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 51
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: Synthetic Oligonucleotide
US-09-931-583-51

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 14;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGGCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGGCGGTCCTGATGCT 20

RESULT 8
US-09-776-479-755
; Sequence 755, Application US/09776479
; Publication No. US20030087848A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; TITLE OF INVENTION: Treatment of Asthma and Allergy
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; CURRENT FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 755
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-755

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 14;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGGCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGGCGGTCCTGATGCT 20

RESULT 9
US-09-954-987B-90
; Sequence 90, Application US/09954987B
; Publication No. US20030104523A1
; GENERAL INFORMATION:
; APPLICANT: Stefan Bauer
; APPLICANT: Grayson B. Lipford
; APPLICANT: Hermann Wagner
; TITLE OF INVENTION: PROCESS FOR HIGH THROUGHPUT SCREENING OF
; TITLE OF INVENTION: CpG-BASED IMMUNO-AGONIST/ANTAGONIST
; FILE REFERENCE: C1041/7016 (AWS)
; CURRENT APPLICATION NUMBER: US/09/954,987B
; CURRENT FILING DATE: 2001-09-17
; PRIOR APPLICATION NUMBER: US 60/233,035
; PRIOR FILING DATE: 2000-09-15
; PRIOR APPLICATION NUMBER: US 60/263,657
; PRIOR FILING DATE: 2001-01-23
; PRIOR APPLICATION NUMBER: US 60/291,726
; PRIOR FILING DATE: 2001-05-17
; PRIOR APPLICATION NUMBER: US 60/300,210
; PRIOR FILING DATE: 2001-06-22
; NUMBER OF SEQ ID NOS: 230
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 90
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-09-954-987B-90

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 14;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGGCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGGCGGTCCTGATGCT 20

RESULT 10
US-09-874-991C-39
; Sequence 39, Application US/09874991C
; Publication No. US20040052763A1
; GENERAL INFORMATION:
; APPLICANT: MOND, JAMES J.
; APPLICANT: FLORA, MICHAEL
; APPLICANT: KLINMAN, DENNIS M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY RNA/DNA HYBRID MOLECULES
; FILE REFERENCE: 07787.0042-0
; CURRENT APPLICATION NUMBER: US/09/874,991C
; CURRENT FILING DATE: 2001-06-07
; PRIOR APPLICATION NUMBER: 60/209,797
; PRIOR FILING DATE: 2000-06-07
; NUMBER OF SEQ ID NOS: 620
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 39
; LENGTH: 20
; TYPE: DNA

; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic HDR
US-09-874-991C-39

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 14;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGGCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGGCGGTCCTGATGCT 20

RESULT 11
US-09-874-991C-105
; Sequence 105, Application US/09874991C
; Publication No. US20040052763A1
; GENERAL INFORMATION:
; APPLICANT: MOND, JAMES J.
; APPLICANT: FLORA, MICHAEL
; APPLICANT: KLINMAN, DENNIS M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY RNA/DNA HYBRID MOLECULES
; FILE REFERENCE: 07787.0042-0
; CURRENT APPLICATION NUMBER: US/09/874,991C
; CURRENT FILING DATE: 2001-06-07
; PRIOR APPLICATION NUMBER: 60/209,797
; PRIOR FILING DATE: 2000-06-07
; NUMBER OF SEQ ID NOS: 620
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 105
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic HDR
US-09-874-991C-105

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 14;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGGCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGGCGGTCCTGATGCT 20

RESULT 12
US-09-874-991C-128
; Sequence 128, Application US/09874991C
; Publication No. US20040052763A1
; GENERAL INFORMATION:
; APPLICANT: MOND, JAMES J.
; APPLICANT: FLORA, MICHAEL
; APPLICANT: KLINMAN, DENNIS M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY RNA/DNA HYBRID MOLECULES
; FILE REFERENCE: 07787.0042-0
; CURRENT APPLICATION NUMBER: US/09/874,991C
; CURRENT FILING DATE: 2001-06-07
; PRIOR APPLICATION NUMBER: 60/209,797
; PRIOR FILING DATE: 2000-06-07
; NUMBER OF SEQ ID NOS: 620
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 128
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic HDR
US-09-874-991C-128

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 14;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGGCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGGCGGTCCTGATGCT 20

RESULT 13
US-09-874-991C-156
; Sequence 156, Application US/09874991C
; Publication No. US20040052763A1
; GENERAL INFORMATION:
; APPLICANT: MOND, JAMES J.
; APPLICANT: FLORA, MICHAEL
; APPLICANT: KLINMAN, DENNIS M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY RNA/DNA HYBRID MOLECULES
; FILE REFERENCE: 07787.0042-0
; CURRENT APPLICATION NUMBER: US/09/874,991C
; CURRENT FILING DATE: 2001-06-07
; PRIOR APPLICATION NUMBER: 60/209,797
; PRIOR FILING DATE: 2000-06-07
; NUMBER OF SEQ ID NOS: 620
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 156
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic HDR
US-09-874-991C-156

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 14;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGGCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGGCGGTCCTGATGCT 20

RESULT 14
US-09-874-991C-177
; Sequence 177, Application US/09874991C
; Publication No. US20040052763A1
; GENERAL INFORMATION:
; APPLICANT: MOND, JAMES J.
; APPLICANT: FLORA, MICHAEL
; APPLICANT: KLINMAN, DENNIS M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY RNA/DNA HYBRID MOLECULES
; FILE REFERENCE: 07787.0042-0
; CURRENT APPLICATION NUMBER: US/09/874,991C
; CURRENT FILING DATE: 2001-06-07
; PRIOR APPLICATION NUMBER: 60/209,797
; PRIOR FILING DATE: 2000-06-07
; NUMBER OF SEQ ID NOS: 620
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 177
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic HDR
US-09-874-991C-177

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 14;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGGCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGGCGGTCCTGATGCT 20

```
RESULT 15
US-09-874-991C-202
; Sequence 202, Application US/09874991C
; Publication No. US20040052763A1
; GENERAL INFORMATION:
;  APPLICANT: MOND, JAMES J.
;  APPLICANT:  FLORA, MICHAEL
;  APPLICANT:  KLINMAN, DENNIS M.
;  TITLE OF INVENTION: IMMUNOSTIMULATORY RNA/DNA HYBRID MOLECULES
;  FILE REFERENCE: 07787.0042-0
;  CURRENT APPLICATION NUMBER: US/09/874,991C
;  CURRENT FILING DATE:  2001-06-07
;  PRIOR APPLICATION NUMBER: 60/209,797
;  PRIOR FILING DATE: 2000-06-07
;  NUMBER OF SEQ ID NOS: 620
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 202
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: Synthetic HDR
US-09-874-991C-202

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGGCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGGCGGTCCTGATGCT 20


Search completed: April 17, 2006, 20:43:35
Job time : 366.5 secs
```

GenCore version 5.1.7

OM nucleic - nucleic search, using sw model

Run on: April 17, 2006, 17:33:01 ; Search time 425 Seconds
(without alignments)
189.545 Million cell updates/sec

Title: US-09-818-918-39
Perfect score: 20
Sequence: 1 tccatggcggtcctgatgct 20

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 9281099 seqs, 2013915447 residues

Total number of hits satisfying chosen parameters: 18562198

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_NA_New:*
1: /SIDS5/ptodata/1/pubpna/US08_NEW_PUB.seq:*
2: /SIDS5/ptodata/1/pubpna/US06_NEW_PUB.seq:*
3: /SIDS5/ptodata/1/pubpna/US07_NEW_PUB.seq:*
4: /SIDS5/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
5: /SIDS5/ptodata/1/pubpna/US09_NEW_PUB.seq:*
6: /SIDS5/ptodata/1/pubpna/US09_NEW_PUB.seq1:*
7: /SIDS5/ptodata/1/pubpna/US10_NEW_PUB.seq:*
8: /SIDS5/ptodata/1/pubpna/US10_NEW_PUB.seq1:*
9: /SIDS5/ptodata/1/pubpna/US10_NEW_PUB.seq2:*
10: /SIDS5/ptodata/1/pubpna/US10_NEW_PUB.seq3:*
11: /SIDS5/ptodata/1/pubpna/US11_NEW_PUB.seq:*
12: /SIDS5/ptodata/1/pubpna/US11_NEW_PUB.seq2:*
13: /SIDS5/ptodata/1/pubpna/US11_NEW_PUB.seq3:*
14: /SIDS5/ptodata/1/pubpna/US11_NEW_PUB.seq4:*
15: /SIDS5/ptodata/1/pubpna/US60_NEW_PUB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	20	100.0	20	8	US-10-619-279-34	Sequence 34, Appl
2	20	100.0	20	8	US-10-435-656-39	Sequence 39, Appl
3	20	100.0	20	10	US-10-382-822-34	Sequence 34, Appl
4	20	100.0	20	14	US-11-127-654-728	Sequence 728, App
5	20	100.0	20	14	US-11-134-918-39	Sequence 39, Appl
6	20	100.0	20	14	US-11-031-460-39	Sequence 39, Appl
7	20	100.0	20	14	US-11-067-587-39	Sequence 39, Appl
8	20	100.0	20	14	US-11-099-683-89	Sequence 89, Appl
9	20	100.0	20	14	US-11-099-683-90	Sequence 90, Appl
10	19	95.0	20	8	US-10-497-591A-97	Sequence 97, Appl
11	18.4	92.0	20	8	US-10-619-279-28	Sequence 28, Appl
12	18.4	92.0	20	8	US-10-619-279-33	Sequence 33, Appl
13	18.4	92.0	20	8	US-10-619-279-35	Sequence 35, Appl
14	18.4	92.0	20	8	US-10-435-656-31	Sequence 31, Appl
15	18.4	92.0	20	8	US-10-435-656-33	Sequence 33, Appl
16	18.4	92.0	20	8	US-10-435-656-34	Sequence 34, Appl
17	18.4	92.0	20	8	US-10-435-656-37	Sequence 37, Appl
18	18.4	92.0	20	8	US-10-435-656-38	Sequence 38, Appl
19	18.4	92.0	20	8	US-10-435-656-40	Sequence 40, Appl
20	18.4	92.0	20	10	US-10-382-822-28	Sequence 28, Appl
21	18.4	92.0	20	10	US-10-382-822-33	Sequence 33, Appl
22	18.4	92.0	20	10	US-10-382-822-35	Sequence 35, Appl
23	18.4	92.0	20	12	US-11-127-797-21	Sequence 21, Appl
24	18.4	92.0	20	12	US-11-127-803-21	Sequence 21, Appl
25	18.4	92.0	20	12	US-11-128-127-21	Sequence 21, Appl
26	18.4	92.0	20	14	US-11-127-654-377	Sequence 377, App
c 27	18.4	92.0	20	14	US-11-127-654-383	Sequence 383, App
c 28	18.4	92.0	20	14	US-11-127-654-444	Sequence 444, App
29	18.4	92.0	20	14	US-11-127-654-550	Sequence 550, App
30	18.4	92.0	20	14	US-11-127-654-727	Sequence 727, App
31	18.4	92.0	20	14	US-11-127-654-735	Sequence 735, App
32	18.4	92.0	20	14	US-11-127-654-736	Sequence 736, App
33	18.4	92.0	20	14	US-11-127-654-748	Sequence 748, App
34	18.4	92.0	20	14	US-11-127-654-902	Sequence 902, App
35	18.4	92.0	20	14	US-11-134-918-31	Sequence 31, Appl
36	18.4	92.0	20	14	US-11-134-918-33	Sequence 33, Appl
37	18.4	92.0	20	14	US-11-134-918-34	Sequence 34, Appl
38	18.4	92.0	20	14	US-11-134-918-37	Sequence 37, Appl
39	18.4	92.0	20	14	US-11-134-918-38	Sequence 38, Appl
40	18.4	92.0	20	14	US-11-134-918-40	Sequence 40, Appl
41	18.4	92.0	20	14	US-11-031-460-31	Sequence 31, Appl
42	18.4	92.0	20	14	US-11-031-460-33	Sequence 33, Appl
43	18.4	92.0	20	14	US-11-031-460-34	Sequence 34, Appl
44	18.4	92.0	20	14	US-11-031-460-37	Sequence 37, Appl
45	18.4	92.0	20	14	US-11-031-460-38	Sequence 38, Appl

ALIGNMENTS

RESULT 1
US-10-619-279-34
; Sequence 34, Application US/10619279
; Publication No. US20050267057A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7023/HCL
; CURRENT APPLICATION NUMBER: US/10/619,279
; CURRENT FILING DATE: 2003-07-14
; PRIOR APPLICATION NUMBER: US 08/960,774
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 123
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 34
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-619-279-34

Query Match 100.0%; Score 20; DB 8; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.3;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGGCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGGCGGTCCTGATGCT 20

RESULT 2
US-10-435-656-39
; Sequence 39, Application US/10435656
; Publication No. US20050277604A1

; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AWS)
; CURRENT APPLICATION NUMBER: US/10/435,656
; CURRENT FILING DATE: 2003-05-09
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 39
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-10-435-656-39

Query Match 100.0%; Score 20; DB 8; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.3;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGGCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGGCGGTCCTGATGCT 20

RESULT 3
US-10-382-822-34
; Sequence 34, Application US/10382822
; Publication No. US20060058251A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Methods for Treating and Preventing
; TITLE OF INVENTION: Infectious Disease
; FILE REFERENCE: C01039.70062.US
; CURRENT APPLICATION NUMBER: US/10/382,822
; CURRENT FILING DATE: 2003-03-06
; PRIOR APPLICATION NUMBER: US 09/630,319
; PRIOR FILING DATE: 2000-07-31
; PRIOR APPLICATION NUMBER: US 08/960,774
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 124
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 34
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-382-822-34

Query Match 100.0%; Score 20; DB 10; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.3;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGGCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGGCGGTCCTGATGCT 20

RESULT 4
US-11-127-654-728
; Sequence 728, Application US/11127654
; Publication No. US20050250726A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Berg, Daniel J.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
; TITLE OF INVENTION: INFLAMMATORY DISEASES
; FILE REFERENCE: C1039.70060US01
; CURRENT APPLICATION NUMBER: US/11/127,654
; CURRENT FILING DATE: 2005-05-12
; PRIOR APPLICATION NUMBER: US 10/112,653
; PRIOR FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/279,642
; PRIOR FILING DATE: 2001-03-29
; NUMBER OF SEQ ID NOS: 1040
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 728
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-127-654-728

Query Match 100.0%; Score 20; DB 14; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.3;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGGCGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGGCGGTCCTGATGCT 20

RESULT 5
US-11-134-918-39
; Sequence 39, Application US/11134918
; Publication No. US20050267064A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AWS)
; CURRENT APPLICATION NUMBER: US/11/134,918
; CURRENT FILING DATE: 2005-05-23
; PRIOR APPLICATION NUMBER: US/09/818,918
; PRIOR FILING DATE: 2001-03-27
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 39
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-134-918-39

Query Match 100.0%; Score 20; DB 14; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.3;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 TCCATGGCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGGCGGTCCTGATGCT 20


RESULT 6
US-11-031-460-39
; Sequence 39, Application US/11031460
; Publication No. US20050277609A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Kline, Joel N.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7048 (AWS)
;  CURRENT APPLICATION NUMBER: US/11/031,460
;  CURRENT FILING DATE:  2005-01-07
;  PRIOR APPLICATION NUMBER: US/09/818,918
;  PRIOR FILING DATE: 2001-03-27
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  NUMBER OF SEQ ID NOS: 56
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 39
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-11-031-460-39

  Query Match             100.0%;  Score 20;  DB 14;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 2.3;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGGCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGGCGGTCCTGATGCT 20


RESULT 7
US-11-067-587-39
; Sequence 39, Application US/11067587
; Publication No. US20060003955A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Kline, Joel N.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7048 (AWS)
;  CURRENT APPLICATION NUMBER: US/11/067,587
;  CURRENT FILING DATE:  2005-02-25
;  PRIOR APPLICATION NUMBER: US/09/818,918
;  PRIOR FILING DATE: 2001-03-27
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  NUMBER OF SEQ ID NOS: 56
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 39
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-11-067-587-39

  Query Match             100.0%;  Score 20;  DB 14;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 2.3;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGGCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGGCGGTCCTGATGCT 20


RESULT 8
US-11-099-683-89
; Sequence 89, Application US/11099683
; Publication No. US20060019916A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur
;  APPLICANT:  Vollmer, Jorg
;  TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACIDS FOR INDUCING IL-10 RESPONSES
;  FILE REFERENCE: C1037.70047US01
;  CURRENT APPLICATION NUMBER: US/11/099,683
;  CURRENT FILING DATE:  2005-04-04
;  PRIOR APPLICATION NUMBER: US 60/558,951
;  PRIOR FILING DATE: 2004-04-02
;  NUMBER OF SEQ ID NOS: 143
;  SOFTWARE: PatentIn version 3.3
; SEQ ID NO 89
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-11-099-683-89

  Query Match             100.0%;  Score 20;  DB 14;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 2.3;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGGCGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGGCGGTCCTGATGCT 20


RESULT 9
US-11-099-683-90
; Sequence 90, Application US/11099683
; Publication No. US20060019916A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur
;  APPLICANT:  Vollmer, Jorg
;  TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACIDS FOR INDUCING IL-10 RESPONSES
;  FILE REFERENCE: C1037.70047US01
;  CURRENT APPLICATION NUMBER: US/11/099,683
;  CURRENT FILING DATE:  2005-04-04
;  PRIOR APPLICATION NUMBER: US 60/558,951
;  PRIOR FILING DATE: 2004-04-02
;  NUMBER OF SEQ ID NOS: 143
;  SOFTWARE: PatentIn version 3.3
; SEQ ID NO 90
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-11-099-683-90

  Query Match             100.0%;  Score 20;  DB 14;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 2.3;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGGCGGTCCTGATGCT 20
              ||||||||||||||||||||
```

```
Db          1 TCCATGGCGGTCCTGATGCT 20


RESULT 10
US-10-497-591A-97
; Sequence 97, Application US/10497591A
; Publication No. US20050250716A1
; GENERAL INFORMATION:
;  APPLICANT: SCHMIDT, WALTER
;  APPLICANT:  SCHELLACK, CAROLA
;  APPLICANT:  EGYED, ALENA
;  APPLICANT:  LINGNAU, KAREN
;  TITLE OF INVENTION: IMMUNOSTIMULATORY OLIGODEOXYNUCLEOTIDES
;  FILE REFERENCE: SONN:045US
;  CURRENT APPLICATION NUMBER: US/10/497,591A
;  CURRENT FILING DATE:  2004-06-03
;  PRIOR APPLICATION NUMBER: PCT/EP02/13791
;  PRIOR FILING DATE: 2002-12-05
;  PRIOR APPLICATION NUMBER: A 1924/2001
;  PRIOR FILING DATE: 2001-12-07
;  NUMBER OF SEQ ID NOS: 113
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 97
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:  Synthetic
;   OTHER INFORMATION: Primer
;   FEATURE:
;   NAME/KEY: modified_base
;   LOCATION: (9)
;   OTHER INFORMATION: n = inosine or uracil
US-10-497-591A-97

  Query Match             95.0%;  Score 19;  DB 8;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 7.2;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGGCGGTCCTGATGCT 20
              ||||||| ||||||||||
Db          1 TCCATGGCNGTCCTGATGCT 20


RESULT 11
US-10-619-279-28
; Sequence 28, Application US/10619279
; Publication No. US20050267057A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7023/HCL
;  CURRENT APPLICATION NUMBER: US/10/619,279
;  CURRENT FILING DATE:  2003-07-14
;  PRIOR APPLICATION NUMBER: US 08/960,774
;  PRIOR FILING DATE: 1997-10-30
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  NUMBER OF SEQ ID NOS: 123
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 28
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Oligonucleotide
US-10-619-279-28

  Query Match             92.0%;  Score 18.4;  DB 8;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 14;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGGCGGTCCTGATGCT 20
              |||||| ||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 12
US-10-619-279-33
; Sequence 33, Application US/10619279
; Publication No. US20050267057A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7023/HCL
;  CURRENT APPLICATION NUMBER: US/10/619,279
;  CURRENT FILING DATE:  2003-07-14
;  PRIOR APPLICATION NUMBER: US 08/960,774
;  PRIOR FILING DATE: 1997-10-30
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  NUMBER OF SEQ ID NOS: 123
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 33
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Oligonucleotide
US-10-619-279-33

  Query Match             92.0%;  Score 18.4;  DB 8;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 14;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGGCGGTCCTGATGCT 20
              |||||| ||||||||||||
Db          1 TCCATGCCGGTCCTGATGCT 20


RESULT 13
US-10-619-279-35
; Sequence 35, Application US/10619279
; Publication No. US20050267057A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7023/HCL
;  CURRENT APPLICATION NUMBER: US/10/619,279
;  CURRENT FILING DATE:  2003-07-14
;  PRIOR APPLICATION NUMBER: US 08/960,774
;  PRIOR FILING DATE: 1997-10-30
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  NUMBER OF SEQ ID NOS: 123
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 35
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Oligonucleotide
US-10-619-279-35
```

```
  Query Match             92.0%;  Score 18.4;  DB 8;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 14;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGGCGGTCCTGATGCT 20
              |||||| ||||||||||||||
Db          1 TCCATGACGGTCCTGATGCT 20


RESULT 14
US-10-435-656-31
; Sequence 31, Application US/10435656
; Publication No. US20050277604A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Kline, Joel N.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7048 (AWS)
;  CURRENT APPLICATION NUMBER: US/10/435,656
;  CURRENT FILING DATE:  2003-05-09
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  NUMBER OF SEQ ID NOS: 56
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 31
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-10-435-656-31

  Query Match             92.0%;  Score 18.4;  DB 8;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 14;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGGCGGTCCTGATGCT 20
              |||||| ||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 15
US-10-435-656-33
; Sequence 33, Application US/10435656
; Publication No. US20050277604A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Kline, Joel N.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7048 (AWS)
;  CURRENT APPLICATION NUMBER: US/10/435,656
;  CURRENT FILING DATE:  2003-05-09
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  NUMBER OF SEQ ID NOS: 56
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 33
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
;   FEATURE:
;   NAME/KEY: modified_base
;   LOCATION: (8)...(8)
;   OTHER INFORMATION: m5c
US-10-435-656-33

  Query Match             92.0%;  Score 18.4;  DB 8;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 14;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGGCGGTCCTGATGCT 20
              |||||| ||||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


Search completed: April 17, 2006, 18:51:09
Job time : 425.125 secs
```

GenCore version 5.1.7

OM nucleic - nucleic search, using sw model

Run on: April 17, 2006, 14:43:57 ; Search time 56.375 Seconds
(without alignments)
630.621 Million cell updates/sec

Title: US-09-818-918-40
Perfect score: 20
Sequence: 1 tccatgacggtcctgatgct 20

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 1303057 seqs, 888780828 residues

Total number of hits satisfying chosen parameters: 2606114

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_NA:*
1: /cgn2_6/ptodata/1/ina/1_COMB.seq:*
2: /cgn2_6/ptodata/1/ina/5_COMB.seq:*
3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/1/ina/H_COMB.seq:*
6: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
7: /cgn2_6/ptodata/1/ina/PP_COMB.seq:*
8: /cgn2_6/ptodata/1/ina/RE_COMB.seq:*
9: /cgn2_6/ptodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	20	100.0	20	3	US-08-738-652-40	Sequence 40, Appl
2	20	100.0	20	3	US-09-286-098-45	Sequence 45, Appl
3	20	100.0	20	3	US-08-960-774-35	Sequence 35, Appl
4	20	100.0	20	3	US-09-325-193A-38	Sequence 38, Appl
5	20	100.0	20	3	US-09-191-170-40	Sequence 40, Appl
6	20	100.0	20	3	US-09-337-619-35	Sequence 35, Appl
7	20	100.0	20	3	US-09-954-987B-80	Sequence 80, Appl
8	20	100.0	20	3	US-09-672-126B-80	Sequence 80, Appl
9	18.4	92.0	20	2	US-08-436-714-7	Sequence 7, Appli
10	18.4	92.0	20	2	US-08-442-705-7	Sequence 7, Appli
11	18.4	92.0	20	2	US-08-332-829-7	Sequence 7, Appli
12	18.4	92.0	20	2	US-09-133-774-11	Sequence 11, Appl
13	18.4	92.0	20	3	US-08-386-063-21	Sequence 21, Appl
14	18.4	92.0	20	3	US-08-386-063-25	Sequence 25, Appl
15	18.4	92.0	20	3	US-09-303-862-11	Sequence 11, Appl
16	18.4	92.0	20	3	US-08-386-063-21	Sequence 21, Appl
17	18.4	92.0	20	3	US-08-386-063-25	Sequence 25, Appl
18	18.4	92.0	20	3	US-08-738-652-7	Sequence 7, Appli
19	18.4	92.0	20	3	US-08-738-652-31	Sequence 31, Appl
20	18.4	92.0	20	3	US-08-738-652-33	Sequence 33, Appl
21	18.4	92.0	20	3	US-08-738-652-34	Sequence 34, Appl
22	18.4	92.0	20	3	US-08-738-652-35	Sequence 35, Appl
23	18.4	92.0	20	3	US-08-738-652-37	Sequence 37, Appl
24	18.4	92.0	20	3	US-08-738-652-38	Sequence 38, Appl
25	18.4	92.0	20	3	US-08-738-652-39	Sequence 39, Appl
26	18.4	92.0	20	3	US-08-738-652-44	Sequence 44, Appl
27	18.4	92.0	20	3	US-08-738-652-54	Sequence 54, Appl
28	18.4	92.0	20	3	US-09-286-098-22	Sequence 22, Appl
29	18.4	92.0	20	3	US-09-286-098-23	Sequence 23, Appl
30	18.4	92.0	20	3	US-09-286-098-24	Sequence 24, Appl
31	18.4	92.0	20	3	US-09-286-098-42	Sequence 42, Appl
32	18.4	92.0	20	3	US-09-286-098-43	Sequence 43, Appl
33	18.4	92.0	20	3	US-09-286-098-44	Sequence 44, Appl
34	18.4	92.0	20	3	US-08-960-774-7	Sequence 7, Appli
35	18.4	92.0	20	3	US-08-960-774-28	Sequence 28, Appl
36	18.4	92.0	20	3	US-08-960-774-33	Sequence 33, Appl
37	18.4	92.0	20	3	US-08-960-774-34	Sequence 34, Appl
38	18.4	92.0	20	3	US-08-960-774-87	Sequence 87, Appl
39	18.4	92.0	20	3	US-08-960-774-89	Sequence 89, Appl
40	18.4	92.0	20	3	US-09-082-649B-68	Sequence 68, Appl
41	18.4	92.0	20	3	US-09-082-649B-79	Sequence 79, Appl
42	18.4	92.0	20	3	US-09-325-193A-17	Sequence 17, Appl
43	18.4	92.0	20	3	US-09-325-193A-18	Sequence 18, Appl
44	18.4	92.0	20	3	US-09-325-193A-19	Sequence 19, Appl
45	18.4	92.0	20	3	US-09-325-193A-35	Sequence 35, Appl

ALIGNMENTS

RESULT 1
US-08-738-652-40
; Sequence 40, Application US/08738652B
; Patent No. 6207646
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7004 HCL
; CURRENT APPLICATION NUMBER: US/08/738,652B
; CURRENT FILING DATE: 1996-10-30
; EARLIER APPLICATION NUMBER: US 08/276,358
; EARLIER FILING DATE: 1994-07-15
; EARLIER APPLICATION NUMBER: US 08/386,063
; EARLIER FILING DATE: 1995-02-07
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 40
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-08-738-652-40

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.9;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGGTCCTGATGCT 20

RESULT 2
US-09-286-098-45
; Sequence 45, Application US/09286098
; Patent No. 6218371
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Weiner, George
; TITLE OF INVENTION: Methods and Products for Stimulating the
; TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
; TITLE OF INVENTION: Cytokines
; FILE REFERENCE: C1039/7026/HCL
; CURRENT APPLICATION NUMBER: US/09/286,098
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,729

```
;  EARLIER FILING DATE: 1998-04-03
;  NUMBER OF SEQ ID NOS: 105
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 45
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Sequence
US-09-286-098-45

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGGTCCTGATGCT 20


RESULT 3
US-08-960-774-35
; Sequence 35, Application US/08960774
; Patent No. 6239116
;  GENERAL INFORMATION:
;    APPLICANT:  Krieg et al.,
;    TITLE OF INVENTION:  IMMUNOSTIMULATORY NUCLEIC ACID MOLECULES
;    NUMBER OF SEQUENCES:  111
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Fish & Richardson P.C.
;      STREET:  4225 Executive Square, Suite 1400
;      CITY:  La Jolla
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  92037
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  ASCII text
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/960,774
;      FILING DATE:  30-October-1997
;      CLASSIFICATION:  514
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  U.S. Serial No. 6239116  08/738,652
;      FILING DATE:  October 30, 1996
;      CLASSIFICATION:  514
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Haile, Lisa A.
;      REGISTRATION NUMBER:  38,347
;      REFERENCE/DOCKET NUMBER:  08918/012001
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  619/678-5070
;      TELEFAX:  619/678-5099
;  INFORMATION FOR SEQ ID NO:  35:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
US-08-960-774-35

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGGTCCTGATGCT 20


RESULT 4
US-09-325-193A-38
; Sequence 38, Application US/09325193A
; Patent No. 6406705
; GENERAL INFORMATION:
;  APPLICANT:  Davis, Heather L.
;  APPLICANT:  Schorr, Joachim
;  APPLICANT:  Krieg, Arthur M.
;  TITLE OF INVENTION:  Use of Nucleic Acids Containing
;  TITLE OF INVENTION:  Unmethylated CpG Dinucleotide as an Adjuvant
;  FILE REFERENCE:  C1039/7025/HCL
;  CURRENT APPLICATION NUMBER: US/09/325,193A
;  CURRENT FILING DATE:  1999-06-03
;  PRIOR APPLICATION NUMBER:  US 09/154,614
;  PRIOR FILING DATE:  1998-09-16
;  PRIOR APPLICATION NUMBER:  PCT/US98/04703
;  PRIOR FILING DATE:  1998-03-10
;  PRIOR APPLICATION NUMBER:  US 60/040,376
;  PRIOR FILING DATE:  1997-03-10
;  NUMBER OF SEQ ID NOS:  98
;  SOFTWARE:  FastSEQ for Windows Version 3.0
; SEQ ID NO 38
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Oligonucleotide
US-09-325-193A-38

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGGTCCTGATGCT 20


RESULT 5
US-09-191-170-40
; Sequence 40, Application US/09191170
; Patent No. 6429199
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT: Hartmann, Gunther
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  TITLE OF INVENTION: for Activating Dendritic Cells
;  FILE REFERENCE: C1039/7017
;  CURRENT APPLICATION NUMBER: US/09/191,170
;  CURRENT FILING DATE: 1998-11-13
;  EARLIER APPLICATION NUMBER: US 08/960,774
;  EARLIER FILING DATE: 1997-10-30
;  EARLIER APPLICATION NUMBER: US 08/738,652
;  EARLIER FILING DATE: 1996-10-30
;  EARLIER APPLICATION NUMBER: US 08/386,063
;  EARLIER FILING DATE: 1995-02-07
;  EARLIER APPLICATION NUMBER: US 08/276,358
;  EARLIER FILING DATE: 1994-07-15
;  NUMBER OF SEQ ID NOS: 99
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 40
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: synthetic oligonucleotide
US-09-191-170-40

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGGTCCTGATGCT 20
```

```
                  ||||||||||||||||||||
Db          1 TCCATGACGGTCCTGATGCT 20


RESULT 6
US-09-337-619-35
; Sequence 35, Application US/09337619
; Patent No. 6653292
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  TITLE OF INVENTION: Methods of Treating Cancer Using
;  TITLE OF INVENTION: Immunostimulatory Oligonucleotides
;  FILE REFERENCE: C1039/7021/HCL
;  CURRENT APPLICATION NUMBER: US/09/337,619
;  CURRENT FILING DATE: 1999-06-21
;  EARLIER APPLICATION NUMBER: US 08/960,774
;  EARLIER FILING DATE: 1997-10-30
;  EARLIER APPLICATION NUMBER: US 08/738,652
;  EARLIER FILING DATE: 1996-10-30
;  EARLIER APPLICATION NUMBER: US 08/386,063
;  EARLIER FILING DATE: 1995-02-07
;  EARLIER APPLICATION NUMBER: US 08/276,358
;  EARLIER FILING DATE: 1994-07-15
;  NUMBER OF SEQ ID NOS: 123
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 35
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Oligonucleotide
US-09-337-619-35

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGGTCCTGATGCT 20


RESULT 7
US-09-954-987B-80
; Sequence 80, Application US/09954987B
; Patent No. 6943240
; GENERAL INFORMATION:
;  APPLICANT: Stefan Bauer
;  APPLICANT:  Grayson B. Lipford
;  APPLICANT:  Hermann Wagner
;  TITLE OF INVENTION: PROCESS FOR HIGH THROUGHPUT SCREENING OF
;  TITLE OF INVENTION:  CpG-BASED IMMUNO-AGONIST/ANTAGONIST
;  FILE REFERENCE: C1041/7016 (AWS)
;  CURRENT APPLICATION NUMBER: US/09/954,987B
;  CURRENT FILING DATE:  2001-09-17
;  PRIOR APPLICATION NUMBER: US 60/233,035
;  PRIOR FILING DATE: 2000-09-15
;  PRIOR APPLICATION NUMBER: US 60/263,657
;  PRIOR FILING DATE: 2001-01-23
;  PRIOR APPLICATION NUMBER: US 60/291,726
;  PRIOR FILING DATE: 2001-05-17
;  PRIOR APPLICATION NUMBER: US 60/300,210
;  PRIOR FILING DATE: 2001-06-22
;  NUMBER OF SEQ ID NOS: 230
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 80
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-09-954-987B-80

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGGTCCTGATGCT 20


RESULT 8
US-09-672-126B-80
; Sequence 80, Application US/09672126B
; Patent No. 6949520
; GENERAL INFORMATION:
;  APPLICANT: Hartmann, Gunther
;  APPLICANT:  Bratzler, Robert L.
;  APPLICANT:  Krieg, Arthur
;  TITLE OF INVENTION: Methods Related to Immunostimulatory
;  TITLE OF INVENTION:  Nucleic Acid-Induced Interferon
;  FILE REFERENCE: C1039/7044
;  CURRENT APPLICATION NUMBER: US/09/672,126B
;  CURRENT FILING DATE:  2000-09-27
;  PRIOR APPLICATION NUMBER: 60/156,147
;  PRIOR FILING DATE: 1999-09-29
;  NUMBER OF SEQ ID NOS: 169
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 80
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Oligonucleotide
US-09-672-126B-80

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGGTCCTGATGCT 20


RESULT 9
US-08-436-714-7
; Sequence 7, Application US/08436714
; Patent No. 5602244
;  GENERAL INFORMATION:
;    APPLICANT:  Marvin H. Caruthers et al
;    TITLE OF INVENTION:  Nucleoside and Polynucleotide
;    TITLE OF INVENTION:  Thiophosphoramidite and Phosphorodithioate Compounds and Proce
;    NUMBER OF SEQUENCES:  8
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Yahwak & Associates
;      STREET:  25 Skytop Drive
;      CITY:  Trumbull
;      STATE:  Connecticut
;      COUNTRY:  USA
;      ZIP:  06611
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  floppy disk
;      COMPUTER:  Macintosh
;      OPERATING SYSTEM:  MS-DOS
;      SOFTWARE:  Microsoft Word 4.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/436,714
;      FILING DATE:
;      CLASSIFICATION:  536
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  George M. Yahwak
;      REGISTRATION NUMBER:  26,824
;      REFERENCE/DOCKET NUMBER:  CU 311 BIGCIP
;    TELECOMMUNICATION INFORMATION:
```

```
;      TELEPHONE:  (203)268-1951
;      TELEFAX:  (203)268-1951
;  INFORMATION FOR SEQ ID NO:  7:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-436-714-7

  Query Match             92.0%;  Score 18.4;  DB 2;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 11;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGGTCCTGATGCT 20
              |||||| ||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 10
US-08-442-705-7
; Sequence 7, Application US/08442705
; Patent No. 5684148
;  GENERAL INFORMATION:
;    APPLICANT:  Marvin H. Caruthers et al
;    TITLE OF INVENTION:  Nucleoside and Polynucleotide
;    TITLE OF INVENTION:  Thiophosphoramidite and Phosphorodithioate Compounds and Proce
;    NUMBER OF SEQUENCES:  8
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Yahwak & Associates
;      STREET:  25 Skytop Drive
;      CITY:  Trumbull
;      STATE:  Connecticut
;      COUNTRY:  USA
;      ZIP:  06611
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  floppy disk
;      COMPUTER:  Macintosh
;      OPERATING SYSTEM:  MS-DOS
;      SOFTWARE:  Microsoft Word 4.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/442,705
;      FILING DATE:
;      CLASSIFICATION:  536
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  George M. Yahwak
;      REGISTRATION NUMBER:  26,824
;      REFERENCE/DOCKET NUMBER:  CU 311 BIGCIP
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (203)268-1951
;      TELEFAX:  (203)268-1951
;  INFORMATION FOR SEQ ID NO:  7:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-442-705-7

  Query Match             92.0%;  Score 18.4;  DB 2;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 11;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGGTCCTGATGCT 20
              |||||| ||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 11
US-08-332-829-7
; Sequence 7, Application US/08332829
; Patent No. 5750666
;  GENERAL INFORMATION:
;    APPLICANT:  Marvin H. Caruthers et al
;    TITLE OF INVENTION:  Nucleoside and Polynucleotide
;    TITLE OF INVENTION:  Thiophosphoramidite and Phosphorodithioate Compounds and Proce
;    NUMBER OF SEQUENCES:  8
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Yahwak & Associates
;      STREET:  25 Skytop Drive
;      CITY:  Trumbull
;      STATE:  Connecticut
;      COUNTRY:  USA
;      ZIP:  06611
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  floppy disk
;      COMPUTER:  Macintosh
;      OPERATING SYSTEM:  MS-DOS
;      SOFTWARE:  Microsoft Word 4.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/332,829
;      FILING DATE:
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  George M. Yahwak
;      REGISTRATION NUMBER:  26,824
;      REFERENCE/DOCKET NUMBER:  CU 311 BIGCIP
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (203)268-1951
;      TELEFAX:  (203)268-1951
;  INFORMATION FOR SEQ ID NO:  7:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-332-829-7

  Query Match             92.0%;  Score 18.4;  DB 2;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 11;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGGTCCTGATGCT 20
              |||||| ||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 12
US-09-133-774-11
; Sequence 11, Application US/09133774B
; Patent No. 5962636
; GENERAL INFORMATION:
;  APPLICANT: Bachmaier, Kurt
;  APPLICANT: Hessel, Andrew J.
;  APPLICANT: Neu M.D., Nikolaus
;  APPLICANT: Penninger, Josef M.
;  TITLE OF INVENTION: No. 5962636el Peptides Capable of Modulating Inflammatory Heart
;  TITLE OF INVENTION: Disease
;  FILE REFERENCE: A-536
;  CURRENT APPLICATION NUMBER: US/09/133,774B
;  CURRENT FILING DATE: 1998-08-12
;  NUMBER OF SEQ ID NOS: 26
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 11
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Chlamydia trachomatis
;   FEATURE:
;   OTHER INFORMATION: An oligonucleotide derived from the DNA encoding a
;   OTHER INFORMATION: 60 kDa cysteine rich outer membrane protein from
;   OTHER INFORMATION: Chlamydia trachomatis.
US-09-133-774-11
```

```
  Query Match             92.0%;  Score 18.4;  DB 2;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 11;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGGTCCTGATGCT 20
              ||||||||| ||||||||||
Db          1 TCCATGACGTTCCTGATGCT 20


RESULT 13
US-08-386-063-21
; Sequence 21, Application US/08386063
; Patent No. 6008200
;  GENERAL INFORMATION:
;    APPLICANT:  Arthur M. Krieg, M.D.
;    TITLE OF INVENTION:  IMMUNOMODULATORY OLIGONUCLEOTIDES
;    NUMBER OF SEQUENCES:  27
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  LAHIVE & COCKFIELD
;      STREET:  60 STATE STREET, SUITE 510
;      CITY:  BOSTON
;      STATE:  MASSACHUSETTS
;      COUNTRY:  USA
;      ZIP:  02109-1875
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  ASCII text
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/386,063
;      FILING DATE:
;      CLASSIFICATION:  424
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  ARNOLD, BETH E.
;      REGISTRATION NUMBER:  35,430
;      REFERENCE/DOCKET NUMBER:  UIZ-013CP
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (617)227-7400
;      TELEFAX:  (617)227-5941
;  INFORMATION FOR SEQ ID NO:  21:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-386-063-21

  Query Match             92.0%;  Score 18.4;  DB 3;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 11;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGGTCCTGATGCT 20
              |||||| ||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 14
US-08-386-063-25
; Sequence 25, Application US/08386063
; Patent No. 6008200
;  GENERAL INFORMATION:
;    APPLICANT:  Arthur M. Krieg, M.D.
;    TITLE OF INVENTION:  IMMUNOMODULATORY OLIGONUCLEOTIDES
;    NUMBER OF SEQUENCES:  27
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  LAHIVE & COCKFIELD
;      STREET:  60 STATE STREET, SUITE 510
;      CITY:  BOSTON
;      STATE:  MASSACHUSETTS
;      COUNTRY:  USA
;      ZIP:  02109-1875
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  ASCII text
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/386,063
;      FILING DATE:
;      CLASSIFICATION:  424
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  ARNOLD, BETH E.
;      REGISTRATION NUMBER:  35,430
;      REFERENCE/DOCKET NUMBER:  UIZ-013CP
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (617)227-7400
;      TELEFAX:  (617)227-5941
;  INFORMATION FOR SEQ ID NO:  25:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-386-063-25

  Query Match             92.0%;  Score 18.4;  DB 3;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 11;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGGTCCTGATGCT 20
              ||||||||| ||||||||||
Db          1 TCCATGACGTTCCTGATGCT 20


RESULT 15
US-09-303-862-11
; Sequence 11, Application US/09303862
; Patent No. 6034230
; GENERAL INFORMATION:
;  APPLICANT: Bachmaier, Kurt
;  APPLICANT: Hessel, Andrew J.
;  APPLICANT: Neu M.D., Nikolaus
;  APPLICANT: Penninger, Josef M.
;  TITLE OF INVENTION: No. 6034230el Peptides Capable of Modulating Inflammatory Heart
;  TITLE OF INVENTION: Disease
;  FILE REFERENCE: A-536
;  CURRENT APPLICATION NUMBER: US/09/303,862
;  CURRENT FILING DATE: 1999-05-03
;  EARLIER APPLICATION NUMBER: 09/133,774
;  EARLIER FILING DATE: 1998-08-12
;  NUMBER OF SEQ ID NOS: 26
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 11
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Chlamydia trachomatis
;   FEATURE:
;   OTHER INFORMATION: An oligonucleotide derived from the DNA encoding a
;   OTHER INFORMATION: 60 kDa cysteine rich outer membrane protein from
;   OTHER INFORMATION: Chlamydia trachomatis.
US-09-303-862-11

  Query Match             92.0%;  Score 18.4;  DB 3;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 11;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGGTCCTGATGCT 20
              ||||||||| ||||||||||
Db          1 TCCATGACGTTCCTGATGCT 20


Search completed: April 17, 2006, 18:04:52
Job time : 56.375 secs
```

GenCore version 5.1.7

OM nucleic - nucleic search, using sw model

Run on: April 17, 2006, 17:32:13 ; Search time 366.375 Seconds
(without alignments)
451.416 Million cell updates/sec

Title: US-09-818-918-40
Perfect score: 20
Sequence: 1 tccatgacggtcctgatgct 20

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 9793542 seqs, 4134689005 residues

Total number of hits satisfying chosen parameters: 19587084

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_NA_Main:*
1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
2: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
3: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*
4: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:*
5: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
6: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
7: /cgn2_6/ptodata/1/pubpna/US10C_PUBCOMB.seq:*
8: /cgn2_6/ptodata/1/pubpna/US10D_PUBCOMB.seq:*
9: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq:*
10: /cgn2_6/ptodata/1/pubpna/US11_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	20	100.0	20	3	US-09-824-468-45	Sequence 45, Appl
2	20	100.0	20	3	US-09-800-266A-38	Sequence 38, Appl
3	20	100.0	20	3	US-09-895-007A-38	Sequence 38, Appl
4	20	100.0	20	3	US-09-920-313-38	Sequence 38, Appl
5	20	100.0	20	3	US-09-888-326-555	Sequence 555, App
6	20	100.0	20	3	US-09-818-918-40	Sequence 40, Appl
7	20	100.0	20	3	US-09-931-583-45	Sequence 45, Appl
8	20	100.0	20	3	US-09-776-479-754	Sequence 754, App
9	20	100.0	20	3	US-09-954-987B-80	Sequence 80, Appl
10	20	100.0	20	3	US-09-874-991C-40	Sequence 40, Appl
11	20	100.0	20	3	US-09-874-991C-106	Sequence 106, App
12	20	100.0	20	3	US-09-874-991C-129	Sequence 129, App
13	20	100.0	20	3	US-09-874-991C-157	Sequence 157, App
14	20	100.0	20	3	US-09-874-991C-178	Sequence 178, App
15	20	100.0	20	3	US-09-874-991C-203	Sequence 203, App
16	20	100.0	20	3	US-09-874-991C-419	Sequence 419, App
17	20	100.0	20	3	US-09-874-991C-438	Sequence 438, App
18	20	100.0	20	3	US-09-776-479-754	Sequence 754, App
19	20	100.0	20	5	US-10-023-909A-38	Sequence 38, Appl
20	20	100.0	20	5	US-10-112-653-727	Sequence 727, App
21	20	100.0	20	5	US-10-017-995-754	Sequence 754, App
22	20	100.0	20	5	US-10-300-247-38	Sequence 38, Appl
23	20	100.0	20	5	US-10-161-229-40	Sequence 40, Appl
24	20	100.0	20	6	US-10-187-264A-35	Sequence 35, Appl
25	20	100.0	20	6	US-10-265-072-81	Sequence 81, Appl
26	20	100.0	20	6	US-10-306-522-35	Sequence 35, Appl
27	20	100.0	20	6	US-10-314-578-754	Sequence 754, App
28	20	100.0	20	6	US-10-434-696-38	Sequence 38, Appl
29	20	100.0	20	7	US-10-373-381-33	Sequence 33, Appl
30	20	100.0	20	7	US-10-719-493-35	Sequence 35, Appl
31	20	100.0	20	7	US-10-627-331-35	Sequence 35, Appl
32	20	100.0	20	7	US-10-666-733-38	Sequence 38, Appl
33	20	100.0	20	7	US-10-743-625-40	Sequence 40, Appl
34	20	100.0	20	7	US-10-679-710-40	Sequence 40, Appl
35	20	100.0	20	7	US-10-769-282-40	Sequence 40, Appl
36	20	100.0	20	8	US-10-817-165-40	Sequence 40, Appl
37	20	100.0	20	8	US-10-877-407-35	Sequence 35, Appl
38	20	100.0	20	8	US-10-877-369-33	Sequence 33, Appl
39	20	100.0	20	8	US-10-816-220-38	Sequence 38, Appl
40	20	100.0	20	8	US-10-831-778-754	Sequence 754, App
41	20	100.0	20	8	US-10-876-892-33	Sequence 33, Appl
42	20	100.0	20	8	US-10-876-965-33	Sequence 33, Appl
43	20	100.0	20	8	US-10-888-886-38	Sequence 38, Appl
44	20	100.0	20	8	US-10-847-642-40	Sequence 40, Appl
45	20	100.0	20	8	US-10-888-785-40	Sequence 40, Appl

ALIGNMENTS

RESULT 1
US-09-824-468-45
; Sequence 45, Application US/09824468
; Patent No. US20020064515A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Weiner, George
; TITLE OF INVENTION: Methods and Products for Stimulating the
; TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
; TITLE OF INVENTION: Cytokines
; FILE REFERENCE: C1039/7026/HCL
; CURRENT APPLICATION NUMBER: US/09/824,468
; CURRENT FILING DATE: 2001-04-02
; PRIOR APPLICATION NUMBER: 09/286,098
; PRIOR FILING DATE: 1999-04-02
; NUMBER OF SEQ ID NOS: 105
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 45
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-824-468-45

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.3;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGGTCCTGATGCT 20

RESULT 2
US-09-800-266A-38
; Sequence 38, Application US/09800266A
; Patent No. US20020156033A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids and
; TITLE OF INVENTION: Cancer Medicament Combination Therapy for the Treatment of
; TITLE OF INVENTION: Cancer
; FILE REFERENCE: C1037/7017(HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/800,266A

; CURRENT FILING DATE: 2001-03-05
; PRIOR APPLICATION NUMBER: US 60/187,214
; PRIOR FILING DATE: 2000-03-03
; NUMBER OF SEQ ID NOS: 146
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 38
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-800-266A-38

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.3;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGGTCCTGATGCT 20

RESULT 3
US-09-895-007A-38
; Sequence 38, Application US/09895007A
; Patent No. US20020165178A1
; GENERAL INFORMATION:
; APPLICANT: Schetter, Christian
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACIDS FOR THE
; TITLE OF INVENTION: TREATMENT OF ANEMIA, THROMBOCYTOPENIA, AND NEUTROPENIA
; FILE REFERENCE: C1041/7014 (AWS)
; CURRENT APPLICATION NUMBER: US/09/895,007A
; CURRENT FILING DATE: 2001-06-28
; PRIOR APPLICATION NUMBER: US 60/214,368
; PRIOR FILING DATE: 2000-06-28
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 38
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-09-895-007A-38

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.3;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGGTCCTGATGCT 20

RESULT 4
US-09-920-313-38
; Sequence 38, Application US/09920313
; Publication No. US20020198165A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; TITLE OF INVENTION: Nucleic Acids for the Prevention and
; TITLE OF INVENTION: Treatment of Gastric Ulcers
; FILE REFERENCE: C1037/7019 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/920,313
; CURRENT FILING DATE: 2001-08-01
; PRIOR APPLICATION NUMBER: US 60/222,248
; PRIOR FILING DATE: 2001-08-08
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 38
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-920-313-38

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.3;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGGTCCTGATGCT 20

RESULT 5
US-09-888-326-555
; Sequence 555, Application US/09888326
; Publication No. US20030026801A1
; GENERAL INFORMATION:
; APPLICANT: Weiner, George
; APPLICANT: Hartmann, Gunther
; TITLE OF INVENTION: Methods for Enhancing Antibody-Induced
; TITLE OF INVENTION: Cell Lysis and Treating Cancer
; FILE REFERENCE: C1039/7052 (AWS)
; CURRENT APPLICATION NUMBER: US/09/888,326
; CURRENT FILING DATE: 2001-06-22
; PRIOR APPLICATION NUMBER: US 60/213,346
; PRIOR FILING DATE: 2000-06-22
; NUMBER OF SEQ ID NOS: 848
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 555
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
; NAME/KEY: misc_feature
; LOCATION: (0)...(0)
; OTHER INFORMATION: phosphodiester backbone
US-09-888-326-555

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.3;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGGTCCTGATGCT 20

RESULT 6
US-09-818-918-40
; Sequence 40, Application US/09818918
; Publication No. US20030050261A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AWS)
; CURRENT APPLICATION NUMBER: US/09/818,918
; CURRENT FILING DATE: 2001-03-27
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSEQ for Windows Version 3.0

; SEQ ID NO 40
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-09-818-918-40

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.3;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGGTCCTGATGCT 20

RESULT 7
US-09-931-583-45
; Sequence 45, Application US/09931583
; Publication No. US20030050263A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred
; TITLE OF INVENTION: Methods and Products for Treating HIV Infection
; FILE REFERENCE: C1039/7053(HCL)
; CURRENT APPLICATION NUMBER: US/09/931,583
; CURRENT FILING DATE: 2001-08-16
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 09/415,142
; PRIOR FILING DATE: 1999-10-09
; NUMBER OF SEQ ID NOS: 75
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 45
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: Synthetic Oligonucleotide
US-09-931-583-45

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.3;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGGTCCTGATGCT 20

RESULT 8
US-09-776-479-754
; Sequence 754, Application US/09776479
; Publication No. US20030087848A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; TITLE OF INVENTION: Treatment of Asthma and Allergy
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; CURRENT FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 754
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-754

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.3;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGGTCCTGATGCT 20

RESULT 9
US-09-954-987B-80
; Sequence 80, Application US/09954987B
; Publication No. US20030104523A1
; GENERAL INFORMATION:
; APPLICANT: Stefan Bauer
; APPLICANT: Grayson B. Lipford
; APPLICANT: Hermann Wagner
; TITLE OF INVENTION: PROCESS FOR HIGH THROUGHPUT SCREENING OF
; TITLE OF INVENTION: CpG-BASED IMMUNO-AGONIST/ANTAGONIST
; FILE REFERENCE: C1041/7016 (AWS)
; CURRENT APPLICATION NUMBER: US/09/954,987B
; CURRENT FILING DATE: 2001-09-17
; PRIOR APPLICATION NUMBER: US 60/233,035
; PRIOR FILING DATE: 2000-09-15
; PRIOR APPLICATION NUMBER: US 60/263,657
; PRIOR FILING DATE: 2001-01-23
; PRIOR APPLICATION NUMBER: US 60/291,726
; PRIOR FILING DATE: 2001-05-17
; PRIOR APPLICATION NUMBER: US 60/300,210
; PRIOR FILING DATE: 2001-06-22
; NUMBER OF SEQ ID NOS: 230
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 80
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-09-954-987B-80

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.3;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGGTCCTGATGCT 20

RESULT 10
US-09-874-991C-40
; Sequence 40, Application US/09874991C
; Publication No. US20040052763A1
; GENERAL INFORMATION:
; APPLICANT: MOND, JAMES J.
; APPLICANT: FLORA, MICHAEL
; APPLICANT: KLINMAN, DENNIS M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY RNA/DNA HYBRID MOLECULES
; FILE REFERENCE: 07787.0042-0
; CURRENT APPLICATION NUMBER: US/09/874,991C
; CURRENT FILING DATE: 2001-06-07
; PRIOR APPLICATION NUMBER: 60/209,797
; PRIOR FILING DATE: 2000-06-07
; NUMBER OF SEQ ID NOS: 620
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 40
; LENGTH: 20
; TYPE: DNA

; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic HDR
US-09-874-991C-40

  Query Match 100.0%; Score 20; DB 3; Length 20;
  Best Local Similarity 100.0%; Pred. No. 6.3;
  Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGGTCCTGATGCT 20
    ||||||||||||||||||||
Db 1 TCCATGACGGTCCTGATGCT 20

RESULT 11
US-09-874-991C-106
; Sequence 106, Application US/09874991C
; Publication No. US20040052763A1
; GENERAL INFORMATION:
; APPLICANT: MOND, JAMES J.
; APPLICANT: FLORA, MICHAEL
; APPLICANT: KLINMAN, DENNIS M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY RNA/DNA HYBRID MOLECULES
; FILE REFERENCE: 07787.0042-0
; CURRENT APPLICATION NUMBER: US/09/874,991C
; CURRENT FILING DATE: 2001-06-07
; PRIOR APPLICATION NUMBER: 60/209,797
; PRIOR FILING DATE: 2000-06-07
; NUMBER OF SEQ ID NOS: 620
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 106
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic HDR
US-09-874-991C-106

  Query Match 100.0%; Score 20; DB 3; Length 20;
  Best Local Similarity 100.0%; Pred. No. 6.3;
  Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGGTCCTGATGCT 20
    ||||||||||||||||||||
Db 1 TCCATGACGGTCCTGATGCT 20

RESULT 12
US-09-874-991C-129
; Sequence 129, Application US/09874991C
; Publication No. US20040052763A1
; GENERAL INFORMATION:
; APPLICANT: MOND, JAMES J.
; APPLICANT: FLORA, MICHAEL
; APPLICANT: KLINMAN, DENNIS M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY RNA/DNA HYBRID MOLECULES
; FILE REFERENCE: 07787.0042-0
; CURRENT APPLICATION NUMBER: US/09/874,991C
; CURRENT FILING DATE: 2001-06-07
; PRIOR APPLICATION NUMBER: 60/209,797
; PRIOR FILING DATE: 2000-06-07
; NUMBER OF SEQ ID NOS: 620
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 129
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic HDR
US-09-874-991C-129

  Query Match 100.0%; Score 20; DB 3; Length 20;
  Best Local Similarity 100.0%; Pred. No. 6.3;
  Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGGTCCTGATGCT 20
    ||||||||||||||||||||
Db 1 TCCATGACGGTCCTGATGCT 20

RESULT 13
US-09-874-991C-157
; Sequence 157, Application US/09874991C
; Publication No. US20040052763A1
; GENERAL INFORMATION:
; APPLICANT: MOND, JAMES J.
; APPLICANT: FLORA, MICHAEL
; APPLICANT: KLINMAN, DENNIS M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY RNA/DNA HYBRID MOLECULES
; FILE REFERENCE: 07787.0042-0
; CURRENT APPLICATION NUMBER: US/09/874,991C
; CURRENT FILING DATE: 2001-06-07
; PRIOR APPLICATION NUMBER: 60/209,797
; PRIOR FILING DATE: 2000-06-07
; NUMBER OF SEQ ID NOS: 620
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 157
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic HDR
US-09-874-991C-157

  Query Match 100.0%; Score 20; DB 3; Length 20;
  Best Local Similarity 100.0%; Pred. No. 6.3;
  Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGGTCCTGATGCT 20
    ||||||||||||||||||||
Db 1 TCCATGACGGTCCTGATGCT 20

RESULT 14
US-09-874-991C-178
; Sequence 178, Application US/09874991C
; Publication No. US20040052763A1
; GENERAL INFORMATION:
; APPLICANT: MOND, JAMES J.
; APPLICANT: FLORA, MICHAEL
; APPLICANT: KLINMAN, DENNIS M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY RNA/DNA HYBRID MOLECULES
; FILE REFERENCE: 07787.0042-0
; CURRENT APPLICATION NUMBER: US/09/874,991C
; CURRENT FILING DATE: 2001-06-07
; PRIOR APPLICATION NUMBER: 60/209,797
; PRIOR FILING DATE: 2000-06-07
; NUMBER OF SEQ ID NOS: 620
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 178
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic HDR
US-09-874-991C-178

  Query Match 100.0%; Score 20; DB 3; Length 20;
  Best Local Similarity 100.0%; Pred. No. 6.3;
  Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGGTCCTGATGCT 20
    ||||||||||||||||||||
Db 1 TCCATGACGGTCCTGATGCT 20

RESULT 15
US-09-874-991C-203
; Sequence 203, Application US/09874991C
; Publication No. US20040052763A1
; GENERAL INFORMATION:
; APPLICANT: MOND, JAMES J.
; APPLICANT: FLORA, MICHAEL
; APPLICANT: KLINMAN, DENNIS M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY RNA/DNA HYBRID MOLECULES
; FILE REFERENCE: 07787.0042-0
; CURRENT APPLICATION NUMBER: US/09/874,991C
; CURRENT FILING DATE: 2001-06-07
; PRIOR APPLICATION NUMBER: 60/209,797
; PRIOR FILING DATE: 2000-06-07
; NUMBER OF SEQ ID NOS: 620
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 203
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic HDR
US-09-874-991C-203

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.3;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGGTCCTGATGCT 20

Search completed: April 17, 2006, 20:43:35
Job time : 367.5 secs

GenCore version 5.1.7

OM nucleic - nucleic search, using sw model

Run on: April 17, 2006, 17:33:01 ; Search time 425 Seconds
(without alignments)
189.545 Million cell updates/sec

Title: US-09-818-918-40
Perfect score: 20
Sequence: 1 tccatgacggtcctgatgct 20

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 9281099 seqs, 2013915447 residues

Total number of hits satisfying chosen parameters: 18562198

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_NA_New:*
1: /SIDS5/ptodata/1/pubpna/US08_NEW_PUB.seq:*
2: /SIDS5/ptodata/1/pubpna/US06_NEW_PUB.seq:*
3: /SIDS5/ptodata/1/pubpna/US07_NEW_PUB.seq:*
4: /SIDS5/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
5: /SIDS5/ptodata/1/pubpna/US09_NEW_PUB.seq:*
6: /SIDS5/ptodata/1/pubpna/US09_NEW_PUB.seq1:*
7: /SIDS5/ptodata/1/pubpna/US10_NEW_PUB.seq:*
8: /SIDS5/ptodata/1/pubpna/US10_NEW_PUB.seq1:*
9: /SIDS5/ptodata/1/pubpna/US10_NEW_PUB.seq2:*
10: /SIDS5/ptodata/1/pubpna/US10_NEW_PUB.seq3:*
11: /SIDS5/ptodata/1/pubpna/US11_NEW_PUB.seq:*
12: /SIDS5/ptodata/1/pubpna/US11_NEW_PUB.seq2:*
13: /SIDS5/ptodata/1/pubpna/US11_NEW_PUB.seq3:*
14: /SIDS5/ptodata/1/pubpna/US11_NEW_PUB.seq4:*
15: /SIDS5/ptodata/1/pubpna/US60_NEW_PUB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	20	100.0	20	8	US-10-619-279-35	Sequence 35, Appl
2	20	100.0	20	8	US-10-435-656-40	Sequence 40, Appl
3	20	100.0	20	10	US-10-382-822-35	Sequence 35, Appl
4	20	100.0	20	14	US-11-127-654-727	Sequence 727, App
5	20	100.0	20	14	US-11-134-918-40	Sequence 40, Appl
6	20	100.0	20	14	US-11-031-460-40	Sequence 40, Appl
7	20	100.0	20	14	US-11-067-587-40	Sequence 40, Appl
8	20	100.0	20	14	US-11-099-683-71	Sequence 71, Appl
9	20	100.0	20	14	US-11-099-683-72	Sequence 72, Appl
10	19	95.0	20	8	US-10-497-591A-98	Sequence 98, Appl
11	18.4	92.0	20	8	US-10-497-591A-12	Sequence 12, Appl
12	18.4	92.0	20	8	US-10-469-561-9	Sequence 9, Appli
13	18.4	92.0	20	8	US-10-619-279-7	Sequence 7, Appli
14	18.4	92.0	20	8	US-10-619-279-28	Sequence 28, Appl
15	18.4	92.0	20	8	US-10-619-279-33	Sequence 33, Appl
16	18.4	92.0	20	8	US-10-619-279-34	Sequence 34, Appl
17	18.4	92.0	20	8	US-10-619-279-87	Sequence 87, Appl
18	18.4	92.0	20	8	US-10-619-279-88	Sequence 88, Appl
19	18.4	92.0	20	8	US-10-435-656-7	Sequence 7, Appli
20	18.4	92.0	20	8	US-10-435-656-31	Sequence 31, Appl
21	18.4	92.0	20	8	US-10-435-656-33	Sequence 33, Appl
22	18.4	92.0	20	8	US-10-435-656-34	Sequence 34, Appl
23	18.4	92.0	20	8	US-10-435-656-35	Sequence 35, Appl
24	18.4	92.0	20	8	US-10-435-656-37	Sequence 37, Appl
25	18.4	92.0	20	8	US-10-435-656-38	Sequence 38, Appl
26	18.4	92.0	20	8	US-10-435-656-39	Sequence 39, Appl
27	18.4	92.0	20	8	US-10-435-656-44	Sequence 44, Appl
28	18.4	92.0	20	8	US-10-435-656-54	Sequence 54, Appl
29	18.4	92.0	20	10	US-10-382-822-7	Sequence 7, Appli
30	18.4	92.0	20	10	US-10-382-822-28	Sequence 28, Appl
31	18.4	92.0	20	10	US-10-382-822-33	Sequence 33, Appl
32	18.4	92.0	20	10	US-10-382-822-34	Sequence 34, Appl
33	18.4	92.0	20	10	US-10-382-822-87	Sequence 87, Appl
34	18.4	92.0	20	10	US-10-382-822-88	Sequence 88, Appl
35	18.4	92.0	20	12	US-11-127-797-21	Sequence 21, Appl
36	18.4	92.0	20	12	US-11-127-797-25	Sequence 25, Appl
37	18.4	92.0	20	12	US-11-127-803-21	Sequence 21, Appl
38	18.4	92.0	20	12	US-11-127-803-25	Sequence 25, Appl
39	18.4	92.0	20	12	US-11-128-127-21	Sequence 21, Appl
40	18.4	92.0	20	12	US-11-128-127-25	Sequence 25, Appl
41	18.4	92.0	20	14	US-11-025-858-2	Sequence 2, Appli
42	18.4	92.0	20	14	US-11-025-858-6	Sequence 6, Appli
43	18.4	92.0	20	14	US-11-127-654-10	Sequence 10, Appl
44	18.4	92.0	20	14	US-11-127-654-11	Sequence 11, Appl
45	18.4	92.0	20	14	US-11-127-654-377	Sequence 377, App

ALIGNMENTS

RESULT 1
US-10-619-279-35
; Sequence 35, Application US/10619279
; Publication No. US20050267057A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7023/HCL
; CURRENT APPLICATION NUMBER: US/10/619,279
; CURRENT FILING DATE: 2003-07-14
; PRIOR APPLICATION NUMBER: US 08/960,774
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 123
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 35
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-619-279-35

Query Match 100.0%; Score 20; DB 8; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGGTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGGTCCTGATGCT 20

RESULT 2
US-10-435-656-40
; Sequence 40, Application US/10435656
; Publication No. US20050277604A1

```
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Kline, Joel N.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7048 (AWS)
;  CURRENT APPLICATION NUMBER: US/10/435,656
;  CURRENT FILING DATE:  2003-05-09
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  NUMBER OF SEQ ID NOS: 56
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 40
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-10-435-656-40

  Query Match             100.0%;  Score 20;  DB 8;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGGTCCTGATGCT 20


RESULT 3
US-10-382-822-35
; Sequence 35, Application US/10382822
; Publication No. US20060058251A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: Methods for Treating and Preventing
;  TITLE OF INVENTION:  Infectious Disease
;  FILE REFERENCE: C01039.70062.US
;  CURRENT APPLICATION NUMBER: US/10/382,822
;  CURRENT FILING DATE:  2003-03-06
;  PRIOR APPLICATION NUMBER: US 09/630,319
;  PRIOR FILING DATE: 2000-07-31
;  PRIOR APPLICATION NUMBER: US 08/960,774
;  PRIOR FILING DATE: 1997-10-30
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  NUMBER OF SEQ ID NOS: 124
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 35
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Oligonucleotide
US-10-382-822-35

  Query Match             100.0%;  Score 20;  DB 10;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGGTCCTGATGCT 20


RESULT 4
US-11-127-654-727
; Sequence 727, Application US/11127654
; Publication No. US20050250726A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Berg, Daniel J.
;  TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
;  TITLE OF INVENTION:  INFLAMMATORY DISEASES
;  FILE REFERENCE: C1039.70060US01
;  CURRENT APPLICATION NUMBER: US/11/127,654
;  CURRENT FILING DATE:  2005-05-12
;  PRIOR APPLICATION NUMBER: US 10/112,653
;  PRIOR FILING DATE: 2002-03-29
;  PRIOR APPLICATION NUMBER: US 60/279,642
;  PRIOR FILING DATE: 2001-03-29
;  NUMBER OF SEQ ID NOS: 1040
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 727
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-11-127-654-727

  Query Match             100.0%;  Score 20;  DB 14;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGGTCCTGATGCT 20


RESULT 5
US-11-134-918-40
; Sequence 40, Application US/11134918
; Publication No. US20050267064A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Kline, Joel N.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7048 (AWS)
;  CURRENT APPLICATION NUMBER: US/11/134,918
;  CURRENT FILING DATE:  2005-05-23
;  PRIOR APPLICATION NUMBER: US/09/818,918
;  PRIOR FILING DATE: 2001-03-27
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  NUMBER OF SEQ ID NOS: 56
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 40
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-11-134-918-40

  Query Match             100.0%;  Score 20;  DB 14;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;
```

```
Qy          1 TCCATGACGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGGTCCTGATGCT 20


RESULT 6
US-11-031-460-40
; Sequence 40, Application US/11031460
; Publication No. US20050277609A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Kline, Joel N.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7048 (AWS)
;  CURRENT APPLICATION NUMBER: US/11/031,460
;  CURRENT FILING DATE:  2005-01-07
;  PRIOR APPLICATION NUMBER: US/09/818,918
;  PRIOR FILING DATE: 2001-03-27
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  NUMBER OF SEQ ID NOS: 56
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 40
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-11-031-460-40

  Query Match             100.0%;  Score 20;  DB 14;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGGTCCTGATGCT 20


RESULT 7
US-11-067-587-40
; Sequence 40, Application US/11067587
; Publication No. US20060003955A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Kline, Joel N.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7048 (AWS)
;  CURRENT APPLICATION NUMBER: US/11/067,587
;  CURRENT FILING DATE:  2005-02-25
;  PRIOR APPLICATION NUMBER: US/09/818,918
;  PRIOR FILING DATE: 2001-03-27
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  NUMBER OF SEQ ID NOS: 56
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 40
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-11-067-587-40

  Query Match             100.0%;  Score 20;  DB 14;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGGTCCTGATGCT 20


RESULT 8
US-11-099-683-71
; Sequence 71, Application US/11099683
; Publication No. US20060019916A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur
;  APPLICANT:  Vollmer, Jorg
;  TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACIDS FOR INDUCING IL-10 RESPONSES
;  FILE REFERENCE: C1037.70047US01
;  CURRENT APPLICATION NUMBER: US/11/099,683
;  CURRENT FILING DATE:  2005-04-04
;  PRIOR APPLICATION NUMBER: US 60/558,951
;  PRIOR FILING DATE: 2004-04-02
;  NUMBER OF SEQ ID NOS: 143
;  SOFTWARE: PatentIn version 3.3
; SEQ ID NO 71
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-11-099-683-71

  Query Match             100.0%;  Score 20;  DB 14;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGGTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGGTCCTGATGCT 20


RESULT 9
US-11-099-683-72
; Sequence 72, Application US/11099683
; Publication No. US20060019916A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur
;  APPLICANT:  Vollmer, Jorg
;  TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACIDS FOR INDUCING IL-10 RESPONSES
;  FILE REFERENCE: C1037.70047US01
;  CURRENT APPLICATION NUMBER: US/11/099,683
;  CURRENT FILING DATE:  2005-04-04
;  PRIOR APPLICATION NUMBER: US 60/558,951
;  PRIOR FILING DATE: 2004-04-02
;  NUMBER OF SEQ ID NOS: 143
;  SOFTWARE: PatentIn version 3.3
; SEQ ID NO 72
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-11-099-683-72

  Query Match             100.0%;  Score 20;  DB 14;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGGTCCTGATGCT 20
              ||||||||||||||||||||
```

```
Db          1 TCCATGACGGTCCTGATGCT 20


RESULT 10
US-10-497-591A-98
; Sequence 98, Application US/10497591A
; Publication No. US20050250716A1
; GENERAL INFORMATION:
;  APPLICANT: SCHMIDT, WALTER
;  APPLICANT:  SCHELLACK, CAROLA
;  APPLICANT:  EGYED, ALENA
;  APPLICANT:  LINGNAU, KAREN
;  TITLE OF INVENTION: IMMUNOSTIMULATORY OLIGODEOXYNUCLEOTIDES
;  FILE REFERENCE: SONN:045US
;  CURRENT APPLICATION NUMBER: US/10/497,591A
;  CURRENT FILING DATE:  2004-06-03
;  PRIOR APPLICATION NUMBER: PCT/EP02/13791
;  PRIOR FILING DATE: 2002-12-05
;  PRIOR APPLICATION NUMBER: A 1924/2001
;  PRIOR FILING DATE: 2001-12-07
;  NUMBER OF SEQ ID NOS: 113
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 98
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:  Synthetic
;   OTHER INFORMATION: Primer
;   FEATURE:
;   NAME/KEY: modified_base
;   LOCATION: (9)
US-10-497-591A-98

  Query Match             95.0%;  Score 19;  DB 8;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 3.4;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGGTCCTGATGCT 20
              ||||||||  ||||||||||
Db          1 TCCATGACNGTCCTGATGCT 20


RESULT 11
US-10-497-591A-12
; Sequence 12, Application US/10497591A
; Publication No. US20050250716A1
; GENERAL INFORMATION:
;  APPLICANT: SCHMIDT, WALTER
;  APPLICANT:  SCHELLACK, CAROLA
;  APPLICANT:  EGYED, ALENA
;  APPLICANT:  LINGNAU, KAREN
;  TITLE OF INVENTION: IMMUNOSTIMULATORY OLIGODEOXYNUCLEOTIDES
;  FILE REFERENCE: SONN:045US
;  CURRENT APPLICATION NUMBER: US/10/497,591A
;  CURRENT FILING DATE:  2004-06-03
;  PRIOR APPLICATION NUMBER: PCT/EP02/13791
;  PRIOR FILING DATE: 2002-12-05
;  PRIOR APPLICATION NUMBER: A 1924/2001
;  PRIOR FILING DATE: 2001-12-07
;  NUMBER OF SEQ ID NOS: 113
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 12
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:  Synthetic
;   OTHER INFORMATION: Primer
US-10-497-591A-12

  Query Match             92.0%;  Score 18.4;  DB 8;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 6.9;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGGTCCTGATGCT 20
              ||||||||  ||||||||||
Db          1 TCCATGACGTTCCTGATGCT 20


RESULT 12
US-10-469-561-9
; Sequence 9, Application US/10469561
; Publication No. US20050260216A1
; GENERAL INFORMATION:
;  APPLICANT: Claire Ashman
;  APPLICANT:  James Scott Crowe
;  APPLICANT:  Jonathan Henry Ellis
;  APPLICANT:  Alan Peter Lewis
;  TITLE OF INVENTION: VACCINE
;  FILE REFERENCE: PG4355USw
;  CURRENT APPLICATION NUMBER: US/10/469,561
;  CURRENT FILING DATE:  2003-08-29
;  NUMBER OF SEQ ID NOS: 25
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 9
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: unknown
;   FEATURE:
;   OTHER INFORMATION: synthetic immunostimulatory oligonucleotide
US-10-469-561-9

  Query Match             92.0%;  Score 18.4;  DB 8;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 6.9;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGGTCCTGATGCT 20
              ||||||||  ||||||||||
Db          1 TCCATGACGTTCCTGATGCT 20


RESULT 13
US-10-619-279-7
; Sequence 7, Application US/10619279
; Publication No. US20050267057A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7023/HCL
;  CURRENT APPLICATION NUMBER: US/10/619,279
;  CURRENT FILING DATE:  2003-07-14
;  PRIOR APPLICATION NUMBER: US 08/960,774
;  PRIOR FILING DATE: 1997-10-30
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  NUMBER OF SEQ ID NOS: 123
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 7
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Oligonucleotide
US-10-619-279-7

  Query Match             92.0%;  Score 18.4;  DB 8;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 6.9;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGGTCCTGATGCT 20
              ||||||||  ||||||||||
```

```
Db          1 TCCATGACGTTCCTGATGCT 20


RESULT 14
US-10-619-279-28
; Sequence 28, Application US/10619279
; Publication No. US20050267057A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7023/HCL
;  CURRENT APPLICATION NUMBER: US/10/619,279
;  CURRENT FILING DATE:  2003-07-14
;  PRIOR APPLICATION NUMBER: US 08/960,774
;  PRIOR FILING DATE: 1997-10-30
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  NUMBER OF SEQ ID NOS: 123
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 28
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Oligonucleotide
US-10-619-279-28

  Query Match             92.0%;  Score 18.4;  DB 8;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 6.9;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGGTCCTGATGCT 20
              |||||| ||||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 15
US-10-619-279-33
; Sequence 33, Application US/10619279
; Publication No. US20050267057A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7023/HCL
;  CURRENT APPLICATION NUMBER: US/10/619,279
;  CURRENT FILING DATE:  2003-07-14
;  PRIOR APPLICATION NUMBER: US 08/960,774
;  PRIOR FILING DATE: 1997-10-30
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  NUMBER OF SEQ ID NOS: 123
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 33
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Oligonucleotide
US-10-619-279-33

  Query Match             92.0%;  Score 18.4;  DB 8;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 6.9;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGGTCCTGATGCT 20
              |||||| ||||||||||||
Db          1 TCCATGCCGGTCCTGATGCT 20


Search completed: April 17, 2006, 18:51:09
Job time : 425.125 secs
```

GenCore version 5.1.7

OM nucleic - nucleic search, using sw model

Run on: April 17, 2006, 14:43:57 ; Search time 56.375 Seconds
(without alignments)
630.621 Million cell updates/sec

Title: US-09-818-918-42
Perfect score: 20
Sequence: 1 tccatgtcgctcctgatgct 20

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 1303057 seqs, 888780828 residues

Total number of hits satisfying chosen parameters: 2606114

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_NA:*
1: /cgn2_6/ptodata/1/ina/1_COMB.seq:*
2: /cgn2_6/ptodata/1/ina/5_COMB.seq:*
3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/1/ina/H_COMB.seq:*
6: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
7: /cgn2_6/ptodata/1/ina/PP_COMB.seq:*
8: /cgn2_6/ptodata/1/ina/RE_COMB.seq:*
9: /cgn2_6/ptodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	20	100.0	20	3	US-08-738-652-42	Sequence 42, Appl
2	20	100.0	20	3	US-09-030-701-4	Sequence 4, Appli
3	20	100.0	20	3	US-09-286-098-47	Sequence 47, Appl
4	20	100.0	20	3	US-08-960-774-37	Sequence 37, Appl
5	20	100.0	20	3	US-09-325-193A-40	Sequence 40, Appl
6	20	100.0	20	3	US-09-191-170-42	Sequence 42, Appl
7	20	100.0	20	3	US-09-337-619-37	Sequence 37, Appl
8	20	100.0	20	3	US-09-495-947-3	Sequence 3, Appli
9	20	100.0	20	3	US-09-954-987B-92	Sequence 92, Appl
10	20	100.0	20	3	US-09-672-126B-90	Sequence 90, Appl
11	18.4	92.0	20	2	US-08-436-714-7	Sequence 7, Appli
12	18.4	92.0	20	2	US-08-442-705-7	Sequence 7, Appli
13	18.4	92.0	20	2	US-08-332-829-7	Sequence 7, Appli
14	18.4	92.0	20	3	US-08-386-063-21	Sequence 21, Appl
15	18.4	92.0	20	3	US-08-386-063-21	Sequence 21, Appl
16	18.4	92.0	20	3	US-08-738-652-31	Sequence 31, Appl
17	18.4	92.0	20	3	US-08-738-652-33	Sequence 33, Appl
18	18.4	92.0	20	3	US-08-738-652-34	Sequence 34, Appl
19	18.4	92.0	20	3	US-08-738-652-37	Sequence 37, Appl
20	18.4	92.0	20	3	US-08-738-652-41	Sequence 41, Appl
21	18.4	92.0	20	3	US-08-738-652-43	Sequence 43, Appl
22	18.4	92.0	20	3	US-08-738-652-53	Sequence 53, Appl
23	18.4	92.0	20	3	US-09-030-701-5	Sequence 5, Appli
24	18.4	92.0	20	3	US-09-286-098-22	Sequence 22, Appl
25	18.4	92.0	20	3	US-09-286-098-23	Sequence 23, Appl
26	18.4	92.0	20	3	US-09-286-098-42	Sequence 42, Appl
27	18.4	92.0	20	3	US-09-286-098-46	Sequence 46, Appl
28	18.4	92.0	20	3	US-09-286-098-48	Sequence 48, Appl
29	18.4	92.0	20	3	US-09-286-098-56	Sequence 56, Appl
30	18.4	92.0	20	3	US-09-286-098-57	Sequence 57, Appl
31	18.4	92.0	20	3	US-08-960-774-28	Sequence 28, Appl
32	18.4	92.0	20	3	US-08-960-774-36	Sequence 36, Appl
33	18.4	92.0	20	3	US-08-960-774-38	Sequence 38, Appl
34	18.4	92.0	20	3	US-08-960-774-89	Sequence 89, Appl
35	18.4	92.0	20	3	US-09-082-649B-71	Sequence 71, Appl
36	18.4	92.0	20	3	US-09-325-193A-17	Sequence 17, Appl
37	18.4	92.0	20	3	US-09-325-193A-18	Sequence 18, Appl
38	18.4	92.0	20	3	US-09-325-193A-35	Sequence 35, Appl
39	18.4	92.0	20	3	US-09-325-193A-39	Sequence 39, Appl
40	18.4	92.0	20	3	US-09-325-193A-49	Sequence 49, Appl
41	18.4	92.0	20	3	US-09-191-170-20	Sequence 20, Appl
42	18.4	92.0	20	3	US-09-191-170-22	Sequence 22, Appl
43	18.4	92.0	20	3	US-09-191-170-23	Sequence 23, Appl
44	18.4	92.0	20	3	US-09-191-170-41	Sequence 41, Appl
45	18.4	92.0	20	3	US-09-191-170-43	Sequence 43, Appl

ALIGNMENTS

RESULT 1
US-08-738-652-42
; Sequence 42, Application US/08738652B
; Patent No. 6207646
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7004 HCL
; CURRENT APPLICATION NUMBER: US/08/738,652B
; CURRENT FILING DATE: 1996-10-30
; EARLIER APPLICATION NUMBER: US 08/276,358
; EARLIER FILING DATE: 1994-07-15
; EARLIER APPLICATION NUMBER: US 08/386,063
; EARLIER FILING DATE: 1995-02-07
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 42
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-08-738-652-42

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.97;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGCTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGCTCCTGATGCT 20

RESULT 2
US-09-030-701-4
; Sequence 4, Application US/09030701B
; Patent No. 6214806
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Schwartz, David A.
; TITLE OF INVENTION: USE OF NUCLEIC ACIDS CONTAINING
; TITLE OF INVENTION: UNMETHYLATED CpG DINUCLEOTIDE IN THE TREATMENT OF
; TITLE OF INVENTION: LPS-ASSOCIATED DISORDERS
; FILE REFERENCE: C1039/7011
; CURRENT APPLICATION NUMBER: US/09/030,701B
; CURRENT FILING DATE: 1998-02-25
; PRIOR APPLICATION NUMBER: 60/039,405

```
;  PRIOR FILING DATE:  1997-02-28
;  NUMBER OF SEQ ID NOS:  65
;  SOFTWARE:  FastSEQ for Windows Version 3.0
; SEQ ID NO 4
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: synthetic oligonucleotide
US-09-030-701-4

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 0.97;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGCTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGCTCCTGATGCT 20


RESULT 3
US-09-286-098-47
; Sequence 47, Application US/09286098
; Patent No. 6218371
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT: Weiner, George
;  TITLE OF INVENTION: Methods and Products for Stimulating the
;  TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
;  TITLE OF INVENTION: Cytokines
;  FILE REFERENCE: C1039/7026/HCL
;  CURRENT APPLICATION NUMBER: US/09/286,098
;  CURRENT FILING DATE: 1999-04-02
;  EARLIER APPLICATION NUMBER: US 60/080,729
;  EARLIER FILING DATE: 1998-04-03
;  NUMBER OF SEQ ID NOS: 105
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 47
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Sequence
US-09-286-098-47

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 0.97;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGCTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGCTCCTGATGCT 20


RESULT 4
US-08-960-774-37
; Sequence 37, Application US/08960774
; Patent No. 6239116
;  GENERAL INFORMATION:
;    APPLICANT:  Krieg et al.,
;    TITLE OF INVENTION:  IMMUNOSTIMULATORY NUCLEIC ACID MOLECULES
;    NUMBER OF SEQUENCES:  111
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Fish & Richardson P.C.
;      STREET:  4225 Executive Square, Suite 1400
;      CITY:  La Jolla
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  92037
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  ASCII text
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/960,774
;      FILING DATE:  30-October-1997
;      CLASSIFICATION:  514
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  U.S. Serial No. 6239116  08/738,652
;      FILING DATE:  October 30, 1996
;      CLASSIFICATION:  514
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Haile, Lisa A.
;      REGISTRATION NUMBER:  38,347
;      REFERENCE/DOCKET NUMBER:  08918/012001
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  619/678-5070
;      TELEFAX:  619/678-5099
;  INFORMATION FOR SEQ ID NO:  37:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
US-08-960-774-37

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 0.97;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGCTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGCTCCTGATGCT 20


RESULT 5
US-09-325-193A-40
; Sequence 40, Application US/09325193A
; Patent No. 6406705
; GENERAL INFORMATION:
;  APPLICANT:  Davis, Heather L.
;  APPLICANT:  Schorr, Joachim
;  APPLICANT:  Krieg, Arthur M.
;  TITLE OF INVENTION:  Use of Nucleic Acids Containing
;  TITLE OF INVENTION:  Unmethylated CpG Dinucleotide as an Adjuvant
;  FILE REFERENCE:  C1039/7025/HCL
;  CURRENT APPLICATION NUMBER: US/09/325,193A
;  CURRENT FILING DATE:  1999-06-03
;  PRIOR APPLICATION NUMBER:  US 09/154,614
;  PRIOR FILING DATE:  1998-09-16
;  PRIOR APPLICATION NUMBER:  PCT/US98/04703
;  PRIOR FILING DATE:  1998-03-10
;  PRIOR APPLICATION NUMBER:  US 60/040,376
;  PRIOR FILING DATE:  1997-03-10
;  NUMBER OF SEQ ID NOS:  98
;  SOFTWARE:  FastSEQ for Windows Version 3.0
; SEQ ID NO 40
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Oligonucleotide
US-09-325-193A-40

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 0.97;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGCTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGCTCCTGATGCT 20


RESULT 6
```

```
US-09-191-170-42
; Sequence 42, Application US/09191170
; Patent No. 6429199
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT: Hartmann, Gunther
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  TITLE OF INVENTION: for Activating Dendritic Cells
;  FILE REFERENCE: C1039/7017
;  CURRENT APPLICATION NUMBER: US/09/191,170
;  CURRENT FILING DATE: 1998-11-13
;  EARLIER APPLICATION NUMBER: US 08/960,774
;  EARLIER FILING DATE: 1997-10-30
;  EARLIER APPLICATION NUMBER: US 08/738,652
;  EARLIER FILING DATE: 1996-10-30
;  EARLIER APPLICATION NUMBER: US 08/386,063
;  EARLIER FILING DATE: 1995-02-07
;  EARLIER APPLICATION NUMBER: US 08/276,358
;  EARLIER FILING DATE: 1994-07-15
;  NUMBER OF SEQ ID NOS: 99
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 42
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: synthetic oligonucleotide
US-09-191-170-42

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 0.97;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGCTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGCTCCTGATGCT 20


RESULT 7
US-09-337-619-37
; Sequence 37, Application US/09337619
; Patent No. 6653292
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  TITLE OF INVENTION: Methods of Treating Cancer Using
;  TITLE OF INVENTION: Immunostimulatory Oligonucleotides
;  FILE REFERENCE: C1039/7021/HCL
;  CURRENT APPLICATION NUMBER: US/09/337,619
;  CURRENT FILING DATE: 1999-06-21
;  EARLIER APPLICATION NUMBER: US 08/960,774
;  EARLIER FILING DATE: 1997-10-30
;  EARLIER APPLICATION NUMBER: US 08/738,652
;  EARLIER FILING DATE: 1996-10-30
;  EARLIER APPLICATION NUMBER: US 08/386,063
;  EARLIER FILING DATE: 1995-02-07
;  EARLIER APPLICATION NUMBER: US 08/276,358
;  EARLIER FILING DATE: 1994-07-15
;  NUMBER OF SEQ ID NOS: 123
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 37
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Oligonucleotide
US-09-337-619-37

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 0.97;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGCTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGCTCCTGATGCT 20


RESULT 8
US-09-495-947-3
; Sequence 3, Application US/09495947
; Patent No. 6887464
; GENERAL INFORMATION:
;  APPLICANT:  Coleman, Timothy P.
;  APPLICANT:  Peterson, Darrell L.
;  TITLE OF INVENTION:  Advanced Antigen Presentation Platform
;  FILE REFERENCE:  05270001ta
;  CURRENT APPLICATION NUMBER: US/09/495,947
;  CURRENT FILING DATE:  2000-02-02
;  PRIOR APPLICATION NUMBER:  US  60/118,526
;  PRIOR FILING DATE:  1999-02-02
;  NUMBER OF SEQ ID NOS:  24
;  SOFTWARE:  PatentIn Ver. 2.1
; SEQ ID NO 3
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:
;   OTHER INFORMATION: immunostimulating oligonucleotides
US-09-495-947-3

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 0.97;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGCTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGCTCCTGATGCT 20


RESULT 9
US-09-954-987B-92
; Sequence 92, Application US/09954987B
; Patent No. 6943240
; GENERAL INFORMATION:
;  APPLICANT: Stefan Bauer
;  APPLICANT:  Grayson B. Lipford
;  APPLICANT:  Hermann Wagner
;  TITLE OF INVENTION: PROCESS FOR HIGH THROUGHPUT SCREENING OF
;  TITLE OF INVENTION:  CpG-BASED IMMUNO-AGONIST/ANTAGONIST
;  FILE REFERENCE: C1041/7016 (AWS)
;  CURRENT APPLICATION NUMBER: US/09/954,987B
;  CURRENT FILING DATE:  2001-09-17
;  PRIOR APPLICATION NUMBER: US 60/233,035
;  PRIOR FILING DATE: 2000-09-15
;  PRIOR APPLICATION NUMBER: US 60/263,657
;  PRIOR FILING DATE: 2001-01-23
;  PRIOR APPLICATION NUMBER: US 60/291,726
;  PRIOR FILING DATE: 2001-05-17
;  PRIOR APPLICATION NUMBER: US 60/300,210
;  PRIOR FILING DATE: 2001-06-22
;  NUMBER OF SEQ ID NOS: 230
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 92
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-09-954-987B-92

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 0.97;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGCTCCTGATGCT 20
              ||||||||||||||||||||
```

```
Db          1 TCCATGTCGCTCCTGATGCT 20


RESULT 10
US-09-672-126B-90
; Sequence 90, Application US/09672126B
; Patent No. 6949520
; GENERAL INFORMATION:
;  APPLICANT: Hartmann, Gunther
;  APPLICANT:  Bratzler, Robert L.
;  APPLICANT:  Krieg, Arthur
;  TITLE OF INVENTION: Methods Related to Immunostimulatory
;  TITLE OF INVENTION:  Nucleic Acid-Induced Interferon
;  FILE REFERENCE: C1039/7044
;  CURRENT APPLICATION NUMBER: US/09/672,126B
;  CURRENT FILING DATE:  2000-09-27
;  PRIOR APPLICATION NUMBER: 60/156,147
;  PRIOR FILING DATE: 1999-09-29
;  NUMBER OF SEQ ID NOS: 169
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 90
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Oligonucleotide
US-09-672-126B-90

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 0.97;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGCTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGCTCCTGATGCT 20


RESULT 11
US-08-436-714-7
; Sequence 7, Application US/08436714
; Patent No. 5602244
;  GENERAL INFORMATION:
;    APPLICANT:  Marvin H. Caruthers et al
;    TITLE OF INVENTION:  Nucleoside and Polynucleotide
;    TITLE OF INVENTION:  Thiophosphoramidite and Phosphorodithioate Compounds and Proce
;    NUMBER OF SEQUENCES:  8
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Yahwak & Associates
;      STREET:  25 Skytop Drive
;      CITY:  Trumbull
;      STATE:  Connecticut
;      COUNTRY:  USA
;      ZIP:  06611
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  floppy disk
;      COMPUTER:  Macintosh
;      OPERATING SYSTEM:  MS-DOS
;      SOFTWARE:  Microsoft Word 4.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/436,714
;      FILING DATE:
;      CLASSIFICATION:  536
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  George M. Yahwak
;      REGISTRATION NUMBER:  26,824
;      REFERENCE/DOCKET NUMBER:  CU 311 BIGCIP
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (203)268-1951
;      TELEFAX:  (203)268-1951
;  INFORMATION FOR SEQ ID NO:  7:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-436-714-7

  Query Match             92.0%;  Score 18.4;  DB 2;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 6.2;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGCTCCTGATGCT 20
              ||||||||| ||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 12
US-08-442-705-7
; Sequence 7, Application US/08442705
; Patent No. 5684148
;  GENERAL INFORMATION:
;    APPLICANT:  Marvin H. Caruthers et al
;    TITLE OF INVENTION:  Nucleoside and Polynucleotide
;    TITLE OF INVENTION:  Thiophosphoramidite and Phosphorodithioate Compounds and Proce
;    NUMBER OF SEQUENCES:  8
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Yahwak & Associates
;      STREET:  25 Skytop Drive
;      CITY:  Trumbull
;      STATE:  Connecticut
;      COUNTRY:  USA
;      ZIP:  06611
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  floppy disk
;      COMPUTER:  Macintosh
;      OPERATING SYSTEM:  MS-DOS
;      SOFTWARE:  Microsoft Word 4.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/442,705
;      FILING DATE:
;      CLASSIFICATION:  536
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  George M. Yahwak
;      REGISTRATION NUMBER:  26,824
;      REFERENCE/DOCKET NUMBER:  CU 311 BIGCIP
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (203)268-1951
;      TELEFAX:  (203)268-1951
;  INFORMATION FOR SEQ ID NO:  7:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-442-705-7

  Query Match             92.0%;  Score 18.4;  DB 2;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 6.2;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGCTCCTGATGCT 20
              ||||||||| ||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 13
US-08-332-829-7
; Sequence 7, Application US/08332829
; Patent No. 5750666
;  GENERAL INFORMATION:
;    APPLICANT:  Marvin H. Caruthers et al
;    TITLE OF INVENTION:  Nucleoside and Polynucleotide
;    TITLE OF INVENTION:  Thiophosphoramidite and Phosphorodithioate Compounds and Proce
;    NUMBER OF SEQUENCES:  8
```

```
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Yahwak & Associates
;      STREET:  25 Skytop Drive
;      CITY:  Trumbull
;      STATE:  Connecticut
;      COUNTRY:  USA
;      ZIP:  06611
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  floppy disk
;      COMPUTER:  Macintosh
;      OPERATING SYSTEM:  MS-DOS
;      SOFTWARE:  Microsoft Word 4.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/332,829
;      FILING DATE:
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  George M. Yahwak
;      REGISTRATION NUMBER:  26,824
;      REFERENCE/DOCKET NUMBER:  CU 311 BIGCIP
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (203)268-1951
;      TELEFAX:  (203)268-1951
;  INFORMATION FOR SEQ ID NO:  7:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-332-829-7

  Query Match             92.0%;  Score 18.4;  DB 2;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 6.2;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGCTCCTGATGCT 20
              ||||||||| ||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 14
US-08-386-063-21
; Sequence 21, Application US/08386063
; Patent No. 6008200
;  GENERAL INFORMATION:
;    APPLICANT:  Arthur M. Krieg, M.D.
;    TITLE OF INVENTION:  IMMUNOMODULATORY OLIGONUCLEOTIDES
;    NUMBER OF SEQUENCES:  27
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  LAHIVE & COCKFIELD
;      STREET:  60 STATE STREET, SUITE 510
;      CITY:  BOSTON
;      STATE:  MASSACHUSETTS
;      COUNTRY:  USA
;      ZIP:  02109-1875
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  ASCII text
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/386,063
;      FILING DATE:
;      CLASSIFICATION:  424
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  ARNOLD, BETH E.
;      REGISTRATION NUMBER:  35,430
;      REFERENCE/DOCKET NUMBER:  UIZ-013CP
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (617)227-7400
;      TELEFAX:  (617)227-5941
;  INFORMATION FOR SEQ ID NO:  21:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-386-063-21

  Query Match             92.0%;  Score 18.4;  DB 3;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 6.2;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGCTCCTGATGCT 20
              ||||||||| ||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 15
US-08-386-063-21
; Sequence 21, Application US/08386063
; Patent No. 6194388
;  GENERAL INFORMATION:
;    APPLICANT:  Arthur M. Krieg, M.D.
;    TITLE OF INVENTION:  IMMUNOMODULATORY OLIGONUCLEOTIDES
;    NUMBER OF SEQUENCES:  27
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  LAHIVE & COCKFIELD
;      STREET:  60 STATE STREET, SUITE 510
;      CITY:  BOSTON
;      STATE:  MASSACHUSETTS
;      COUNTRY:  USA
;      ZIP:  02109-1875
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  ASCII text
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/386,063
;      FILING DATE:
;      CLASSIFICATION:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  ARNOLD, BETH E.
;      REGISTRATION NUMBER:  35,430
;      REFERENCE/DOCKET NUMBER:  UIZ-013CP
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (617)227-7400
;      TELEFAX:  (617)227-5941
;  INFORMATION FOR SEQ ID NO:  21:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-386-063-21

  Query Match             92.0%;  Score 18.4;  DB 3;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 6.2;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGCTCCTGATGCT 20
              ||||||||| ||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


Search completed: April 17, 2006, 18:04:52
Job time : 56.375 secs
```

GenCore version 5.1.7

OM nucleic - nucleic search, using sw model

Run on: April 17, 2006, 17:32:13 ; Search time 366.375 Seconds
(without alignments)
451.416 Million cell updates/sec

Title: US-09-818-918-42
Perfect score: 20
Sequence: 1 tccatgtcgctcctgatgct 20

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 9793542 seqs, 4134689005 residues

Total number of hits satisfying chosen parameters: 19587084

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_NA_Main:*
1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
2: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
3: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*
4: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:*
5: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
6: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
7: /cgn2_6/ptodata/1/pubpna/US10C_PUBCOMB.seq:*
8: /cgn2_6/ptodata/1/pubpna/US10D_PUBCOMB.seq:*
9: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq:*
10: /cgn2_6/ptodata/1/pubpna/US11_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	20	100.0	20	3	US-09-824-468-47	Sequence 47, Appl
2	20	100.0	20	3	US-09-800-266A-40	Sequence 40, Appl
3	20	100.0	20	3	US-09-895-007A-40	Sequence 40, Appl
4	20	100.0	20	3	US-09-920-313-40	Sequence 40, Appl
5	20	100.0	20	3	US-09-818-918-42	Sequence 42, Appl
6	20	100.0	20	3	US-09-931-583-53	Sequence 53, Appl
7	20	100.0	20	3	US-09-954-987B-92	Sequence 92, Appl
8	20	100.0	20	3	US-09-874-991C-42	Sequence 42, Appl
9	20	100.0	20	3	US-09-874-991C-108	Sequence 108, App
10	20	100.0	20	3	US-09-874-991C-131	Sequence 131, App
11	20	100.0	20	3	US-09-874-991C-159	Sequence 159, App
12	20	100.0	20	3	US-09-874-991C-180	Sequence 180, App
13	20	100.0	20	3	US-09-874-991C-205	Sequence 205, App
14	20	100.0	20	3	US-09-874-991C-421	Sequence 421, App
15	20	100.0	20	3	US-09-874-991C-440	Sequence 440, App
16	20	100.0	20	5	US-10-023-909A-40	Sequence 40, Appl
17	20	100.0	20	5	US-10-300-247-40	Sequence 40, Appl
18	20	100.0	20	5	US-10-161-229-42	Sequence 42, Appl
19	20	100.0	20	6	US-10-187-264A-37	Sequence 37, Appl
20	20	100.0	20	6	US-10-265-072-90	Sequence 90, Appl
21	20	100.0	20	6	US-10-306-522-37	Sequence 37, Appl
22	20	100.0	20	6	US-10-434-696-40	Sequence 40, Appl
23	20	100.0	20	7	US-10-373-381-35	Sequence 35, Appl
24	20	100.0	20	7	US-10-719-493-37	Sequence 37, Appl
25	20	100.0	20	7	US-10-627-331-37	Sequence 37, Appl
26	20	100.0	20	7	US-10-666-733-40	Sequence 40, Appl
27	20	100.0	20	7	US-10-743-625-42	Sequence 42, Appl
28	20	100.0	20	7	US-10-679-710-42	Sequence 42, Appl
29	20	100.0	20	7	US-10-769-282-42	Sequence 42, Appl
30	20	100.0	20	8	US-10-817-165-42	Sequence 42, Appl
31	20	100.0	20	8	US-10-857-733-3	Sequence 3, Appli
32	20	100.0	20	8	US-10-877-407-45	Sequence 45, Appl
33	20	100.0	20	8	US-10-877-369-35	Sequence 35, Appl
34	20	100.0	20	8	US-10-816-220-40	Sequence 40, Appl
35	20	100.0	20	8	US-10-876-892-35	Sequence 35, Appl
36	20	100.0	20	8	US-10-876-965-35	Sequence 35, Appl
37	20	100.0	20	8	US-10-888-886-40	Sequence 40, Appl
38	20	100.0	20	8	US-10-847-642-42	Sequence 42, Appl
39	20	100.0	20	8	US-10-888-785-42	Sequence 42, Appl
40	20	100.0	20	8	US-10-649-584-53	Sequence 53, Appl
41	20	100.0	20	8	US-10-831-775-40	Sequence 40, Appl
42	20	100.0	20	9	US-10-888-449-42	Sequence 42, Appl
43	20	100.0	20	9	US-10-894-862-45	Sequence 45, Appl
44	20	100.0	20	9	US-10-894-657-45	Sequence 45, Appl
45	20	100.0	20	9	US-10-884-852-42	Sequence 42, Appl

ALIGNMENTS

RESULT 1
US-09-824-468-47
; Sequence 47, Application US/09824468
; Patent No. US20020064515A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Weiner, George
; TITLE OF INVENTION: Methods and Products for Stimulating the
; TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
; TITLE OF INVENTION: Cytokines
; FILE REFERENCE: C1039/7026/HCL
; CURRENT APPLICATION NUMBER: US/09/824,468
; CURRENT FILING DATE: 2001-04-02
; PRIOR APPLICATION NUMBER: 09/286,098
; PRIOR FILING DATE: 1999-04-02
; NUMBER OF SEQ ID NOS: 105
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 47
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-824-468-47

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGCTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGCTCCTGATGCT 20

RESULT 2
US-09-800-266A-40
; Sequence 40, Application US/09800266A
; Patent No. US20020156033A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids and
; TITLE OF INVENTION: Cancer Medicament Combination Therapy for the Treatment of
; TITLE OF INVENTION: Cancer
; FILE REFERENCE: C1037/7017(HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/800,266A

; CURRENT FILING DATE: 2001-03-05
; PRIOR APPLICATION NUMBER: US 60/187,214
; PRIOR FILING DATE: 2000-03-03
; NUMBER OF SEQ ID NOS: 146
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 40
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-800-266A-40

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGCTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGCTCCTGATGCT 20

RESULT 3
US-09-895-007A-40
; Sequence 40, Application US/09895007A
; Patent No. US20020165178A1
; GENERAL INFORMATION:
; APPLICANT: Schetter, Christian
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACIDS FOR THE
; TITLE OF INVENTION: TREATMENT OF ANEMIA, THROMBOCYTOPENIA, AND NEUTROPENIA
; FILE REFERENCE: C1041/7014 (AWS)
; CURRENT APPLICATION NUMBER: US/09/895,007A
; CURRENT FILING DATE: 2001-06-28
; PRIOR APPLICATION NUMBER: US 60/214,368
; PRIOR FILING DATE: 2000-06-28
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 40
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-09-895-007A-40

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGCTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGCTCCTGATGCT 20

RESULT 4
US-09-920-313-40
; Sequence 40, Application US/09920313
; Publication No. US20020198165A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; TITLE OF INVENTION: Nucleic Acids for the Prevention and
; TITLE OF INVENTION: Treatment of Gastric Ulcers
; FILE REFERENCE: C1037/7019 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/920,313
; CURRENT FILING DATE: 2001-08-01
; PRIOR APPLICATION NUMBER: US 60/222,248
; PRIOR FILING DATE: 2001-08-08
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 40
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-920-313-40

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGCTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGCTCCTGATGCT 20

RESULT 5
US-09-818-918-42
; Sequence 42, Application US/09818918
; Publication No. US20030050261A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AWS)
; CURRENT APPLICATION NUMBER: US/09/818,918
; CURRENT FILING DATE: 2001-03-27
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 42
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-09-818-918-42

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGCTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGCTCCTGATGCT 20

RESULT 6
US-09-931-583-53
; Sequence 53, Application US/09931583
; Publication No. US20030050263A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred
; TITLE OF INVENTION: Methods and Products for Treating HIV Infection
; FILE REFERENCE: C1039/7053(HCL)
; CURRENT APPLICATION NUMBER: US/09/931,583
; CURRENT FILING DATE: 2001-08-16
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 09/415,142
; PRIOR FILING DATE: 1999-10-09
; NUMBER OF SEQ ID NOS: 75
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 53

; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: Synthetic Oligonucleotide
US-09-931-583-53

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGCTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGCTCCTGATGCT 20

RESULT 7
US-09-954-987B-92
; Sequence 92, Application US/09954987B
; Publication No. US20030104523A1
; GENERAL INFORMATION:
; APPLICANT: Stefan Bauer
; APPLICANT: Grayson B. Lipford
; APPLICANT: Hermann Wagner
; TITLE OF INVENTION: PROCESS FOR HIGH THROUGHPUT SCREENING OF
; TITLE OF INVENTION: CpG-BASED IMMUNO-AGONIST/ANTAGONIST
; FILE REFERENCE: C1041/7016 (AWS)
; CURRENT APPLICATION NUMBER: US/09/954,987B
; CURRENT FILING DATE: 2001-09-17
; PRIOR APPLICATION NUMBER: US 60/233,035
; PRIOR FILING DATE: 2000-09-15
; PRIOR APPLICATION NUMBER: US 60/263,657
; PRIOR FILING DATE: 2001-01-23
; PRIOR APPLICATION NUMBER: US 60/291,726
; PRIOR FILING DATE: 2001-05-17
; PRIOR APPLICATION NUMBER: US 60/300,210
; PRIOR FILING DATE: 2001-06-22
; NUMBER OF SEQ ID NOS: 230
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 92
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-09-954-987B-92

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGCTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGCTCCTGATGCT 20

RESULT 8
US-09-874-991C-42
; Sequence 42, Application US/09874991C
; Publication No. US20040052763A1
; GENERAL INFORMATION:
; APPLICANT: MOND, JAMES J.
; APPLICANT: FLORA, MICHAEL
; APPLICANT: KLINMAN, DENNIS M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY RNA/DNA HYBRID MOLECULES
; FILE REFERENCE: 07787.0042-0
; CURRENT APPLICATION NUMBER: US/09/874,991C
; CURRENT FILING DATE: 2001-06-07
; PRIOR APPLICATION NUMBER: 60/209,797
; PRIOR FILING DATE: 2000-06-07
; NUMBER OF SEQ ID NOS: 620
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 42
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic HDR
US-09-874-991C-42

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGCTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGCTCCTGATGCT 20

RESULT 9
US-09-874-991C-108
; Sequence 108, Application US/09874991C
; Publication No. US20040052763A1
; GENERAL INFORMATION:
; APPLICANT: MOND, JAMES J.
; APPLICANT: FLORA, MICHAEL
; APPLICANT: KLINMAN, DENNIS M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY RNA/DNA HYBRID MOLECULES
; FILE REFERENCE: 07787.0042-0
; CURRENT APPLICATION NUMBER: US/09/874,991C
; CURRENT FILING DATE: 2001-06-07
; PRIOR APPLICATION NUMBER: 60/209,797
; PRIOR FILING DATE: 2000-06-07
; NUMBER OF SEQ ID NOS: 620
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 108
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic HDR
US-09-874-991C-108

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGCTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGCTCCTGATGCT 20

RESULT 10
US-09-874-991C-131
; Sequence 131, Application US/09874991C
; Publication No. US20040052763A1
; GENERAL INFORMATION:
; APPLICANT: MOND, JAMES J.
; APPLICANT: FLORA, MICHAEL
; APPLICANT: KLINMAN, DENNIS M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY RNA/DNA HYBRID MOLECULES
; FILE REFERENCE: 07787.0042-0
; CURRENT APPLICATION NUMBER: US/09/874,991C
; CURRENT FILING DATE: 2001-06-07
; PRIOR APPLICATION NUMBER: 60/209,797
; PRIOR FILING DATE: 2000-06-07
; NUMBER OF SEQ ID NOS: 620
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 131
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic HDR
US-09-874-991C-131

```
  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 4.8;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGCTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGCTCCTGATGCT 20


RESULT 11
US-09-874-991C-159
; Sequence 159, Application US/09874991C
; Publication No. US20040052763A1
; GENERAL INFORMATION:
;  APPLICANT: MOND, JAMES J.
;  APPLICANT:  FLORA, MICHAEL
;  APPLICANT:  KLINMAN, DENNIS M.
;  TITLE OF INVENTION: IMMUNOSTIMULATORY RNA/DNA HYBRID MOLECULES
;  FILE REFERENCE: 07787.0042-0
;  CURRENT APPLICATION NUMBER: US/09/874,991C
;  CURRENT FILING DATE:  2001-06-07
;  PRIOR APPLICATION NUMBER: 60/209,797
;  PRIOR FILING DATE: 2000-06-07
;  NUMBER OF SEQ ID NOS: 620
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 159
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: Synthetic HDR
US-09-874-991C-159

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 4.8;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGCTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGCTCCTGATGCT 20


RESULT 12
US-09-874-991C-180
; Sequence 180, Application US/09874991C
; Publication No. US20040052763A1
; GENERAL INFORMATION:
;  APPLICANT: MOND, JAMES J.
;  APPLICANT:  FLORA, MICHAEL
;  APPLICANT:  KLINMAN, DENNIS M.
;  TITLE OF INVENTION: IMMUNOSTIMULATORY RNA/DNA HYBRID MOLECULES
;  FILE REFERENCE: 07787.0042-0
;  CURRENT APPLICATION NUMBER: US/09/874,991C
;  CURRENT FILING DATE:  2001-06-07
;  PRIOR APPLICATION NUMBER: 60/209,797
;  PRIOR FILING DATE: 2000-06-07
;  NUMBER OF SEQ ID NOS: 620
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 180
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: Synthetic HDR
US-09-874-991C-180

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 4.8;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGCTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGCTCCTGATGCT 20


RESULT 13
US-09-874-991C-205
; Sequence 205, Application US/09874991C
; Publication No. US20040052763A1
; GENERAL INFORMATION:
;  APPLICANT: MOND, JAMES J.
;  APPLICANT:  FLORA, MICHAEL
;  APPLICANT:  KLINMAN, DENNIS M.
;  TITLE OF INVENTION: IMMUNOSTIMULATORY RNA/DNA HYBRID MOLECULES
;  FILE REFERENCE: 07787.0042-0
;  CURRENT APPLICATION NUMBER: US/09/874,991C
;  CURRENT FILING DATE:  2001-06-07
;  PRIOR APPLICATION NUMBER: 60/209,797
;  PRIOR FILING DATE: 2000-06-07
;  NUMBER OF SEQ ID NOS: 620
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 205
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: Synthetic HDR
US-09-874-991C-205

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 4.8;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGCTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGCTCCTGATGCT 20


RESULT 14
US-09-874-991C-421
; Sequence 421, Application US/09874991C
; Publication No. US20040052763A1
; GENERAL INFORMATION:
;  APPLICANT: MOND, JAMES J.
;  APPLICANT:  FLORA, MICHAEL
;  APPLICANT:  KLINMAN, DENNIS M.
;  TITLE OF INVENTION: IMMUNOSTIMULATORY RNA/DNA HYBRID MOLECULES
;  FILE REFERENCE: 07787.0042-0
;  CURRENT APPLICATION NUMBER: US/09/874,991C
;  CURRENT FILING DATE:  2001-06-07
;  PRIOR APPLICATION NUMBER: 60/209,797
;  PRIOR FILING DATE: 2000-06-07
;  NUMBER OF SEQ ID NOS: 620
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 421
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: Synthetic HDR
US-09-874-991C-421

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 4.8;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGCTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGCTCCTGATGCT 20


RESULT 15
US-09-874-991C-440
; Sequence 440, Application US/09874991C
; Publication No. US20040052763A1
```

; GENERAL INFORMATION:
; APPLICANT: MOND, JAMES J.
; APPLICANT: FLORA, MICHAEL
; APPLICANT: KLINMAN, DENNIS M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY RNA/DNA HYBRID MOLECULES
; FILE REFERENCE: 07787.0042-0
; CURRENT APPLICATION NUMBER: US/09/874,991C
; CURRENT FILING DATE: 2001-06-07
; PRIOR APPLICATION NUMBER: 60/209,797
; PRIOR FILING DATE: 2000-06-07
; NUMBER OF SEQ ID NOS: 620
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 440
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic HDR
US-09-874-991C-440

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 4.8;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGCTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGCTCCTGATGCT 20

Search completed: April 17, 2006, 20:43:35
Job time : 366.5 secs

GenCore version 5.1.7

OM nucleic - nucleic search, using sw model

Run on: April 17, 2006, 17:33:01 ; Search time 425 Seconds
(without alignments)
189.545 Million cell updates/sec

Title: US-09-818-918-42
Perfect score: 20
Sequence: 1 tccatgtcgctcctgatgct 20

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 9281099 seqs, 2013915447 residues

Total number of hits satisfying chosen parameters: 18562198

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_NA_New:*
1: /SIDS5/ptodata/1/pubpna/US08_NEW_PUB.seq:*
2: /SIDS5/ptodata/1/pubpna/US06_NEW_PUB.seq:*
3: /SIDS5/ptodata/1/pubpna/US07_NEW_PUB.seq:*
4: /SIDS5/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
5: /SIDS5/ptodata/1/pubpna/US09_NEW_PUB.seq:*
6: /SIDS5/ptodata/1/pubpna/US09_NEW_PUB.seq1:*
7: /SIDS5/ptodata/1/pubpna/US10_NEW_PUB.seq:*
8: /SIDS5/ptodata/1/pubpna/US10_NEW_PUB.seq1:*
9: /SIDS5/ptodata/1/pubpna/US10_NEW_PUB.seq2:*
10: /SIDS5/ptodata/1/pubpna/US10_NEW_PUB.seq3:*
11: /SIDS5/ptodata/1/pubpna/US11_NEW_PUB.seq:*
12: /SIDS5/ptodata/1/pubpna/US11_NEW_PUB.seq2:*
13: /SIDS5/ptodata/1/pubpna/US11_NEW_PUB.seq3:*
14: /SIDS5/ptodata/1/pubpna/US11_NEW_PUB.seq4:*
15: /SIDS5/ptodata/1/pubpna/US60_NEW_PUB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	20	100.0	20	8	US-10-619-279-37	Sequence 37, Appl
2	20	100.0	20	8	US-10-435-656-42	Sequence 42, Appl
3	20	100.0	20	9	US-10-533-634-29	Sequence 29, Appl
4	20	100.0	20	10	US-10-382-822-37	Sequence 37, Appl
5	20	100.0	20	14	US-11-134-918-42	Sequence 42, Appl
6	20	100.0	20	14	US-11-031-460-42	Sequence 42, Appl
7	20	100.0	20	14	US-11-067-587-42	Sequence 42, Appl
8	20	100.0	20	14	US-11-099-683-93	Sequence 93, Appl
9	20	100.0	20	14	US-11-099-683-94	Sequence 94, Appl
10	19	95.0	20	8	US-10-497-591A-72	Sequence 72, Appl
11	18.4	92.0	20	8	US-10-619-279-28	Sequence 28, Appl
12	18.4	92.0	20	8	US-10-619-279-36	Sequence 36, Appl
13	18.4	92.0	20	8	US-10-619-279-38	Sequence 38, Appl
14	18.4	92.0	20	8	US-10-619-279-88	Sequence 88, Appl
15	18.4	92.0	20	8	US-10-435-656-31	Sequence 31, Appl
16	18.4	92.0	20	8	US-10-435-656-33	Sequence 33, Appl
17	18.4	92.0	20	8	US-10-435-656-34	Sequence 34, Appl
18	18.4	92.0	20	8	US-10-435-656-37	Sequence 37, Appl
19	18.4	92.0	20	8	US-10-435-656-41	Sequence 41, Appl
20	18.4	92.0	20	8	US-10-435-656-43	Sequence 43, Appl
21	18.4	92.0	20	8	US-10-435-656-53	Sequence 53, Appl
22	18.4	92.0	20	9	US-10-533-634-30	Sequence 30, Appl
23	18.4	92.0	20	10	US-10-382-822-28	Sequence 28, Appl
24	18.4	92.0	20	10	US-10-382-822-36	Sequence 36, Appl
25	18.4	92.0	20	10	US-10-382-822-38	Sequence 38, Appl
26	18.4	92.0	20	10	US-10-382-822-88	Sequence 88, Appl
27	18.4	92.0	20	12	US-11-127-797-21	Sequence 21, Appl
28	18.4	92.0	20	12	US-11-127-803-21	Sequence 21, Appl
29	18.4	92.0	20	12	US-11-128-127-21	Sequence 21, Appl
30	18.4	92.0	20	14	US-11-127-654-8	Sequence 8, Appli
c 31	18.4	92.0	20	14	US-11-127-654-129	Sequence 129, App
32	18.4	92.0	20	14	US-11-127-654-377	Sequence 377, App
c 33	18.4	92.0	20	14	US-11-127-654-383	Sequence 383, App
c 34	18.4	92.0	20	14	US-11-127-654-444	Sequence 444, App
35	18.4	92.0	20	14	US-11-127-654-550	Sequence 550, App
36	18.4	92.0	20	14	US-11-127-654-732	Sequence 732, App
37	18.4	92.0	20	14	US-11-127-654-735	Sequence 735, App
38	18.4	92.0	20	14	US-11-127-654-736	Sequence 736, App
39	18.4	92.0	20	14	US-11-127-654-745	Sequence 745, App
40	18.4	92.0	20	14	US-11-127-654-747	Sequence 747, App
41	18.4	92.0	20	14	US-11-134-918-31	Sequence 31, Appl
42	18.4	92.0	20	14	US-11-134-918-33	Sequence 33, Appl
43	18.4	92.0	20	14	US-11-134-918-34	Sequence 34, Appl
44	18.4	92.0	20	14	US-11-134-918-37	Sequence 37, Appl
45	18.4	92.0	20	14	US-11-134-918-41	Sequence 41, Appl

ALIGNMENTS

RESULT 1
US-10-619-279-37
; Sequence 37, Application US/10619279
; Publication No. US20050267057A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7023/HCL
; CURRENT APPLICATION NUMBER: US/10/619,279
; CURRENT FILING DATE: 2003-07-14
; PRIOR APPLICATION NUMBER: US 08/960,774
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 123
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 37
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-619-279-37

Query Match 100.0%; Score 20; DB 8; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGCTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGCTCCTGATGCT 20

RESULT 2
US-10-435-656-42
; Sequence 42, Application US/10435656
; Publication No. US20050277604A1

; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AWS)
; CURRENT APPLICATION NUMBER: US/10/435,656
; CURRENT FILING DATE: 2003-05-09
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 42
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-10-435-656-42

Query Match 100.0%; Score 20; DB 8; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGCTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGCTCCTGATGCT 20

RESULT 3
US-10-533-634-29
; Sequence 29, Application US/10533634
; Publication No. US20060019239A1
; GENERAL INFORMATION:
; APPLICANT: THE UNITED STATES OF AMERICA AS REPRESENTED BY THE
; APPLICANT: SECRETARY OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES
; APPLICANT: Klinman, Dennis M.
; APPLICANT: Ivins, Bruce
; APPLICANT: Verthelyi, Daniela
; TITLE OF INVENTION: METHOD OF PREVENTING INFECTIONS FROM BIOTERRORISM AGENTS WITH
; TITLE OF INVENTION: IMMUNOSTIMULATORY CpG OLIGONUCLEOTIDES
; FILE REFERENCE: 4239-67021-06
; CURRENT APPLICATION NUMBER: US/10/533,634
; CURRENT FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: PCT/US2003/034523
; PRIOR FILING DATE: 2003-10-31
; PRIOR APPLICATION NUMBER: US 60/422,964
; PRIOR FILING DATE: 2002-11-01
; NUMBER OF SEQ ID NOS: 199
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 29
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: K oligonucleotide
US-10-533-634-29

Query Match 100.0%; Score 20; DB 9; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGCTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGCTCCTGATGCT 20

RESULT 4
US-10-382-822-37
; Sequence 37, Application US/10382822
; Publication No. US20060058251A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Methods for Treating and Preventing
; TITLE OF INVENTION: Infectious Disease
; FILE REFERENCE: C01039.70062.US
; CURRENT APPLICATION NUMBER: US/10/382,822
; CURRENT FILING DATE: 2003-03-06
; PRIOR APPLICATION NUMBER: US 09/630,319
; PRIOR FILING DATE: 2000-07-31
; PRIOR APPLICATION NUMBER: US 08/960,774
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 124
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 37
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-382-822-37

Query Match 100.0%; Score 20; DB 10; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGCTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGCTCCTGATGCT 20

RESULT 5
US-11-134-918-42
; Sequence 42, Application US/11134918
; Publication No. US20050267064A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AWS)
; CURRENT APPLICATION NUMBER: US/11/134,918
; CURRENT FILING DATE: 2005-05-23
; PRIOR APPLICATION NUMBER: US/09/818,918
; PRIOR FILING DATE: 2001-03-27
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 42
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-134-918-42

Query Match 100.0%; Score 20; DB 14; Length 20;

Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 TCCATGTCGCTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGCTCCTGATGCT 20
```

RESULT 6
US-11-031-460-42
; Sequence 42, Application US/11031460
; Publication No. US20050277609A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AWS)
; CURRENT APPLICATION NUMBER: US/11/031,460
; CURRENT FILING DATE: 2005-01-07
; PRIOR APPLICATION NUMBER: US/09/818,918
; PRIOR FILING DATE: 2001-03-27
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 42
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-031-460-42

Query Match 100.0%; Score 20; DB 14; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 TCCATGTCGCTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGCTCCTGATGCT 20
```

RESULT 7
US-11-067-587-42
; Sequence 42, Application US/11067587
; Publication No. US20060003955A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AWS)
; CURRENT APPLICATION NUMBER: US/11/067,587
; CURRENT FILING DATE: 2005-02-25
; PRIOR APPLICATION NUMBER: US/09/818,918
; PRIOR FILING DATE: 2001-03-27
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 42
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-067-587-42

Query Match 100.0%; Score 20; DB 14; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 TCCATGTCGCTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGCTCCTGATGCT 20
```

RESULT 8
US-11-099-683-93
; Sequence 93, Application US/11099683
; Publication No. US20060019916A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur
; APPLICANT: Vollmer, Jorg
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACIDS FOR INDUCING IL-10 RESPONSES
; FILE REFERENCE: C1037.70047US01
; CURRENT APPLICATION NUMBER: US/11/099,683
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: US 60/558,951
; PRIOR FILING DATE: 2004-04-02
; NUMBER OF SEQ ID NOS: 143
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 93
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-099-683-93

Query Match 100.0%; Score 20; DB 14; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 TCCATGTCGCTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGCTCCTGATGCT 20
```

RESULT 9
US-11-099-683-94
; Sequence 94, Application US/11099683
; Publication No. US20060019916A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur
; APPLICANT: Vollmer, Jorg
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACIDS FOR INDUCING IL-10 RESPONSES
; FILE REFERENCE: C1037.70047US01
; CURRENT APPLICATION NUMBER: US/11/099,683
; CURRENT FILING DATE: 2005-04-04
; PRIOR APPLICATION NUMBER: US 60/558,951
; PRIOR FILING DATE: 2004-04-02
; NUMBER OF SEQ ID NOS: 143
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 94
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-099-683-94

Query Match 100.0%; Score 20; DB 14; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 TCCATGTCGCTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGCTCCTGATGCT 20


RESULT 10
US-10-497-591A-72
; Sequence 72, Application US/10497591A
; Publication No. US20050250716A1
; GENERAL INFORMATION:
;  APPLICANT: SCHMIDT, WALTER
;  APPLICANT:  SCHELLACK, CAROLA
;  APPLICANT:  EGYED, ALENA
;  APPLICANT:  LINGNAU, KAREN
;  TITLE OF INVENTION: IMMUNOSTIMULATORY OLIGODEOXYNUCLEOTIDES
;  FILE REFERENCE: SONN:045US
;  CURRENT APPLICATION NUMBER: US/10/497,591A
;  CURRENT FILING DATE:  2004-06-03
;  PRIOR APPLICATION NUMBER: PCT/EP02/13791
;  PRIOR FILING DATE: 2002-12-05
;  PRIOR APPLICATION NUMBER: A 1924/2001
;  PRIOR FILING DATE: 2001-12-07
;  NUMBER OF SEQ ID NOS: 113
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 72
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:  Synthetic
;   OTHER INFORMATION: Primer
;   FEATURE:
;   NAME/KEY: modified_base
;   LOCATION: (9)
;   OTHER INFORMATION: n = inosine or uracil
US-10-497-591A-72

  Query Match             95.0%;  Score 19;  DB 8;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 3.5;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGCTCCTGATGCT 20
              ||||||||.||||||||||
Db          1 TCCATGTCNCTCCTGATGCT 20


RESULT 11
US-10-619-279-28
; Sequence 28, Application US/10619279
; Publication No. US20050267057A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7023/HCL
;  CURRENT APPLICATION NUMBER: US/10/619,279
;  CURRENT FILING DATE:  2003-07-14
;  PRIOR APPLICATION NUMBER: US 08/960,774
;  PRIOR FILING DATE: 1997-10-30
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  NUMBER OF SEQ ID NOS: 123
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 28
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Oligonucleotide
US-10-619-279-28

  Query Match             92.0%;  Score 18.4;  DB 8;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 7.3;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGCTCCTGATGCT 20
              |||||||| ||||||||||
Db          1 TCCATGTCGGTCCTGATGCT 20


RESULT 12
US-10-619-279-36
; Sequence 36, Application US/10619279
; Publication No. US20050267057A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7023/HCL
;  CURRENT APPLICATION NUMBER: US/10/619,279
;  CURRENT FILING DATE:  2003-07-14
;  PRIOR APPLICATION NUMBER: US 08/960,774
;  PRIOR FILING DATE: 1997-10-30
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  NUMBER OF SEQ ID NOS: 123
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 36
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Oligonucleotide
US-10-619-279-36

  Query Match             92.0%;  Score 18.4;  DB 8;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 7.3;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGCTCCTGATGCT 20
              |||||||| ||||||||||
Db          1 TCCATGTCGATCCTGATGCT 20


RESULT 13
US-10-619-279-38
; Sequence 38, Application US/10619279
; Publication No. US20050267057A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7023/HCL
;  CURRENT APPLICATION NUMBER: US/10/619,279
;  CURRENT FILING DATE:  2003-07-14
;  PRIOR APPLICATION NUMBER: US 08/960,774
;  PRIOR FILING DATE: 1997-10-30
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  NUMBER OF SEQ ID NOS: 123
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 38
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
```

; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-619-279-38

Query Match 92.0%; Score 18.4; DB 8; Length 20;
Best Local Similarity 95.0%; Pred. No. 7.3;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 TCCATGTCGCTCCTGATGCT 20
||||||||| ||||||||||
Db 1 TCCATGTCGTTCCTGATGCT 20

RESULT 14
US-10-619-279-88
; Sequence 88, Application US/10619279
; Publication No. US20050267057A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7023/HCL
; CURRENT APPLICATION NUMBER: US/10/619,279
; CURRENT FILING DATE: 2003-07-14
; PRIOR APPLICATION NUMBER: US 08/960,774
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 123
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 88
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-619-279-88

Query Match 92.0%; Score 18.4; DB 8; Length 20;
Best Local Similarity 95.0%; Pred. No. 7.3;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 TCCATGTCGCTCCTGATGCT 20
|||||| ||||||||||||
Db 1 TCCATGACGCTCCTGATGCT 20

RESULT 15
US-10-435-656-31
; Sequence 31, Application US/10435656
; Publication No. US20050277604A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AWS)
; CURRENT APPLICATION NUMBER: US/10/435,656
; CURRENT FILING DATE: 2003-05-09
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 31
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-10-435-656-31

Query Match 92.0%; Score 18.4; DB 8; Length 20;
Best Local Similarity 95.0%; Pred. No. 7.3;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 TCCATGTCGCTCCTGATGCT 20
||||||||| ||||||||||
Db 1 TCCATGTCGGTCCTGATGCT 20

Search completed: April 17, 2006, 18:51:09
Job time : 425.125 secs

GenCore version 5.1.7

OM nucleic - nucleic search, using sw model

Run on: April 17, 2006, 14:43:57 ; Search time 56.375 Seconds
(without alignments)
630.621 Million cell updates/sec

Title: US-09-818-918-43
Perfect score: 20
Sequence: 1 tccatgtcgttcctgatgct 20

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 1303057 seqs, 888780828 residues

Total number of hits satisfying chosen parameters: 2606114

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_NA:*
1: /cgn2_6/ptodata/1/ina/1_COMB.seq:*
2: /cgn2_6/ptodata/1/ina/5_COMB.seq:*
3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/1/ina/H_COMB.seq:*
6: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
7: /cgn2_6/ptodata/1/ina/PP_COMB.seq:*
8: /cgn2_6/ptodata/1/ina/RE_COMB.seq:*
9: /cgn2_6/ptodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	20	100.0	20	3	US-08-738-652-43	Sequence 43, Appl
2	20	100.0	20	3	US-08-738-652-53	Sequence 53, Appl
3	20	100.0	20	3	US-09-030-701-5	Sequence 5, Appli
4	20	100.0	20	3	US-09-286-098-48	Sequence 48, Appl
5	20	100.0	20	3	US-09-286-098-56	Sequence 56, Appl
6	20	100.0	20	3	US-09-286-098-57	Sequence 57, Appl
7	20	100.0	20	3	US-08-960-774-38	Sequence 38, Appl
8	20	100.0	20	3	US-09-082-649B-71	Sequence 71, Appl
9	20	100.0	20	3	US-09-325-193A-49	Sequence 49, Appl
10	20	100.0	20	3	US-09-191-170-43	Sequence 43, Appl
11	20	100.0	20	3	US-09-191-170-51	Sequence 51, Appl
12	20	100.0	20	3	US-09-337-619-38	Sequence 38, Appl
13	20	100.0	20	3	US-09-965-101-71	Sequence 71, Appl
14	20	100.0	20	3	US-09-495-947-4	Sequence 4, Appli
15	20	100.0	20	3	US-09-954-987B-96	Sequence 96, Appl
16	19	95.0	20	3	US-09-030-701-25	Sequence 25, Appl
17	19	95.0	20	3	US-08-960-774-44	Sequence 44, Appl
18	19	95.0	20	3	US-09-082-649B-72	Sequence 72, Appl
19	19	95.0	20	3	US-09-337-619-44	Sequence 44, Appl
20	19	95.0	20	3	US-09-965-101-72	Sequence 72, Appl
21	18.4	92.0	20	2	US-08-436-714-7	Sequence 7, Appli
22	18.4	92.0	20	2	US-08-442-705-7	Sequence 7, Appli
23	18.4	92.0	20	2	US-08-332-829-7	Sequence 7, Appli
24	18.4	92.0	20	2	US-09-133-774-11	Sequence 11, Appl
25	18.4	92.0	20	3	US-08-386-063-21	Sequence 21, Appl
26	18.4	92.0	20	3	US-08-386-063-25	Sequence 25, Appl
27	18.4	92.0	20	3	US-09-303-862-11	Sequence 11, Appl
28	18.4	92.0	20	3	US-08-386-063-21	Sequence 21, Appl
29	18.4	92.0	20	3	US-08-386-063-25	Sequence 25, Appl
30	18.4	92.0	20	3	US-08-738-652-7	Sequence 7, Appli
31	18.4	92.0	20	3	US-08-738-652-31	Sequence 31, Appl
32	18.4	92.0	20	3	US-08-738-652-33	Sequence 33, Appl
33	18.4	92.0	20	3	US-08-738-652-34	Sequence 34, Appl
34	18.4	92.0	20	3	US-08-738-652-35	Sequence 35, Appl
35	18.4	92.0	20	3	US-08-738-652-37	Sequence 37, Appl
36	18.4	92.0	20	3	US-08-738-652-41	Sequence 41, Appl
37	18.4	92.0	20	3	US-08-738-652-42	Sequence 42, Appl
38	18.4	92.0	20	3	US-08-738-652-44	Sequence 44, Appl
39	18.4	92.0	20	3	US-08-738-652-54	Sequence 54, Appl
40	18.4	92.0	20	3	US-09-030-701-4	Sequence 4, Appli
41	18.4	92.0	20	3	US-09-286-098-22	Sequence 22, Appl
42	18.4	92.0	20	3	US-09-286-098-23	Sequence 23, Appl
43	18.4	92.0	20	3	US-09-286-098-24	Sequence 24, Appl
44	18.4	92.0	20	3	US-09-286-098-42	Sequence 42, Appl
45	18.4	92.0	20	3	US-09-286-098-46	Sequence 46, Appl

ALIGNMENTS

RESULT 1
US-08-738-652-43
; Sequence 43, Application US/08738652B
; Patent No. 6207646
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7004 HCL
; CURRENT APPLICATION NUMBER: US/08/738,652B
; CURRENT FILING DATE: 1996-10-30
; EARLIER APPLICATION NUMBER: US 08/276,358
; EARLIER FILING DATE: 1994-07-15
; EARLIER APPLICATION NUMBER: US 08/386,063
; EARLIER FILING DATE: 1995-02-07
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 43
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-08-738-652-43

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGTTCCTGATGCT 20

RESULT 2
US-08-738-652-53
; Sequence 53, Application US/08738652B
; Patent No. 6207646
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7004 HCL
; CURRENT APPLICATION NUMBER: US/08/738,652B
; CURRENT FILING DATE: 1996-10-30
; EARLIER APPLICATION NUMBER: US 08/276,358
; EARLIER FILING DATE: 1994-07-15
; EARLIER APPLICATION NUMBER: US 08/386,063
; EARLIER FILING DATE: 1995-02-07

```
;  NUMBER OF SEQ ID NOS: 55
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 53
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
;   FEATURE:
;   NAME/KEY: modified_base
;   LOCATION: (8)...(8)
;   OTHER INFORMATION: m5c
US-08-738-652-53

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGTTCCTGATGCT 20


RESULT 3
US-09-030-701-5
; Sequence 5, Application US/09030701B
; Patent No. 6214806
; GENERAL INFORMATION:
;  APPLICANT:  Krieg, Arthur M.
;  APPLICANT:  Schwartz, David A.
;  TITLE OF INVENTION:  USE OF NUCLEIC ACIDS CONTAINING
;  TITLE OF INVENTION:  UNMETHYLATED CpG DINUCLEOTIDE IN THE TREATMENT OF
;  TITLE OF INVENTION:  LPS-ASSOCIATED DISORDERS
;  FILE REFERENCE:  C1039/7011
;  CURRENT APPLICATION NUMBER: US/09/030,701B
;  CURRENT FILING DATE:  1998-02-25
;  PRIOR APPLICATION NUMBER:  60/039,405
;  PRIOR FILING DATE:  1997-02-28
;  NUMBER OF SEQ ID NOS:  65
;  SOFTWARE:  FastSEQ for Windows Version 3.0
; SEQ ID NO 5
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: synthetic oligonucleotide
US-09-030-701-5

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGTTCCTGATGCT 20


RESULT 4
US-09-286-098-48
; Sequence 48, Application US/09286098
; Patent No. 6218371
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT: Weiner, George
;  TITLE OF INVENTION: Methods and Products for Stimulating the
;  TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
;  TITLE OF INVENTION: Cytokines
;  FILE REFERENCE: C1039/7026/HCL
;  CURRENT APPLICATION NUMBER: US/09/286,098
;  CURRENT FILING DATE: 1999-04-02
;  EARLIER APPLICATION NUMBER: US 60/080,729
;  EARLIER FILING DATE: 1998-04-03
;  NUMBER OF SEQ ID NOS: 105
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 48
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Sequence
US-09-286-098-48

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGTTCCTGATGCT 20


RESULT 5
US-09-286-098-56
; Sequence 56, Application US/09286098
; Patent No. 6218371
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT: Weiner, George
;  TITLE OF INVENTION: Methods and Products for Stimulating the
;  TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
;  TITLE OF INVENTION: Cytokines
;  FILE REFERENCE: C1039/7026/HCL
;  CURRENT APPLICATION NUMBER: US/09/286,098
;  CURRENT FILING DATE: 1999-04-02
;  EARLIER APPLICATION NUMBER: US 60/080,729
;  EARLIER FILING DATE: 1998-04-03
;  NUMBER OF SEQ ID NOS: 105
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 56
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Sequence
US-09-286-098-56

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGTTCCTGATGCT 20


RESULT 6
US-09-286-098-57
; Sequence 57, Application US/09286098
; Patent No. 6218371
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT: Weiner, George
;  TITLE OF INVENTION: Methods and Products for Stimulating the
;  TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
;  TITLE OF INVENTION: Cytokines
;  FILE REFERENCE: C1039/7026/HCL
;  CURRENT APPLICATION NUMBER: US/09/286,098
;  CURRENT FILING DATE: 1999-04-02
;  EARLIER APPLICATION NUMBER: US 60/080,729
;  EARLIER FILING DATE: 1998-04-03
;  NUMBER OF SEQ ID NOS: 105
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 57
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
```

```
;   FEATURE:
;   OTHER INFORMATION: Synthetic Sequence
;   FEATURE:
;   NAME/KEY: modified_base
;   LOCATION: (8)...(8)
;   OTHER INFORMATION: m5c
US-09-286-098-57

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGTTCCTGATGCT 20


RESULT 7
US-08-960-774-38
; Sequence 38, Application US/08960774
; Patent No. 6239116
;  GENERAL INFORMATION:
;    APPLICANT:  Krieg et al.,
;    TITLE OF INVENTION:  IMMUNOSTIMULATORY NUCLEIC ACID MOLECULES
;    NUMBER OF SEQUENCES:  111
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Fish & Richardson P.C.
;      STREET:  4225 Executive Square, Suite 1400
;      CITY:  La Jolla
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  92037
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  ASCII text
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/960,774
;      FILING DATE:  30-October-1997
;      CLASSIFICATION:  514
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  U.S. Serial No. 6239116  08/738,652
;      FILING DATE:  October 30, 1996
;      CLASSIFICATION:  514
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Haile, Lisa A.
;      REGISTRATION NUMBER:  38,347
;      REFERENCE/DOCKET NUMBER:  08918/012001
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  619/678-5070
;      TELEFAX:  619/678-5099
;  INFORMATION FOR SEQ ID NO:  38:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
US-08-960-774-38

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGTTCCTGATGCT 20


RESULT 8
US-09-082-649B-71
; Sequence 71, Application US/09082649B
; Patent No. 6339068
; GENERAL INFORMATION:
;  APPLICANT:  Davis, Heather L.
;  APPLICANT:  Krieg, Arthur M.
;  APPLICANT:  Schorr, Joachim
;  APPLICANT:  Wu, Tong
;  TITLE OF INVENTION:  Vectors and Methods for Immunization or
;  TITLE OF INVENTION:  Therapeutic Protocols
;  FILE REFERENCE:  C1039/7009
;  CURRENT APPLICATION NUMBER: US/09/082,649B
;  CURRENT FILING DATE:  1998-05-20
;  PRIOR APPLICATION NUMBER:  US 60/047,233
;  PRIOR FILING DATE:  1997-05-20
;  PRIOR APPLICATION NUMBER:  US 60/047,209
;  PRIOR FILING DATE:  1997-05-20
;  NUMBER OF SEQ ID NOS:  85
;  SOFTWARE:  FastSEQ for Windows Version 3.0
; SEQ ID NO 71
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: synthetic oligonucleotide
US-09-082-649B-71

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGTTCCTGATGCT 20


RESULT 9
US-09-325-193A-49
; Sequence 49, Application US/09325193A
; Patent No. 6406705
; GENERAL INFORMATION:
;  APPLICANT:  Davis, Heather L.
;  APPLICANT:  Schorr, Joachim
;  APPLICANT:  Krieg, Arthur M.
;  TITLE OF INVENTION:  Use of Nucleic Acids Containing
;  TITLE OF INVENTION:  Unmethylated CpG Dinucleotide as an Adjuvant
;  FILE REFERENCE:  C1039/7025/HCL
;  CURRENT APPLICATION NUMBER: US/09/325,193A
;  CURRENT FILING DATE:  1999-06-03
;  PRIOR APPLICATION NUMBER:  US 09/154,614
;  PRIOR FILING DATE:  1998-09-16
;  PRIOR APPLICATION NUMBER:  PCT/US98/04703
;  PRIOR FILING DATE:  1998-03-10
;  PRIOR APPLICATION NUMBER:  US 60/040,376
;  PRIOR FILING DATE:  1997-03-10
;  NUMBER OF SEQ ID NOS:  98
;  SOFTWARE:  FastSEQ for Windows Version 3.0
; SEQ ID NO 49
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Oligonucleotide
US-09-325-193A-49

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGTTCCTGATGCT 20


RESULT 10
```

```
US-09-191-170-43
; Sequence 43, Application US/09191170
; Patent No. 6429199
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT: Hartmann, Gunther
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  TITLE OF INVENTION: for Activating Dendritic Cells
;  FILE REFERENCE: C1039/7017
;  CURRENT APPLICATION NUMBER: US/09/191,170
;  CURRENT FILING DATE: 1998-11-13
;  EARLIER APPLICATION NUMBER: US 08/960,774
;  EARLIER FILING DATE: 1997-10-30
;  EARLIER APPLICATION NUMBER: US 08/738,652
;  EARLIER FILING DATE: 1996-10-30
;  EARLIER APPLICATION NUMBER: US 08/386,063
;  EARLIER FILING DATE: 1995-02-07
;  EARLIER APPLICATION NUMBER: US 08/276,358
;  EARLIER FILING DATE: 1994-07-15
;  NUMBER OF SEQ ID NOS: 99
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 43
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: synthetic oligonucleotide
US-09-191-170-43

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGTTCCTGATGCT 20


RESULT 11
US-09-191-170-51
; Sequence 51, Application US/09191170
; Patent No. 6429199
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT: Hartmann, Gunther
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  TITLE OF INVENTION: for Activating Dendritic Cells
;  FILE REFERENCE: C1039/7017
;  CURRENT APPLICATION NUMBER: US/09/191,170
;  CURRENT FILING DATE: 1998-11-13
;  EARLIER APPLICATION NUMBER: US 08/960,774
;  EARLIER FILING DATE: 1997-10-30
;  EARLIER APPLICATION NUMBER: US 08/738,652
;  EARLIER FILING DATE: 1996-10-30
;  EARLIER APPLICATION NUMBER: US 08/386,063
;  EARLIER FILING DATE: 1995-02-07
;  EARLIER APPLICATION NUMBER: US 08/276,358
;  EARLIER FILING DATE: 1994-07-15
;  NUMBER OF SEQ ID NOS: 99
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 51
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: synthetic oligonucleotide
;   FEATURE:
;   NAME/KEY: modified_base
;   LOCATION: (8)...(8)
;   OTHER INFORMATION: m5c
US-09-191-170-51

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGTTCCTGATGCT 20


RESULT 12
US-09-337-619-38
; Sequence 38, Application US/09337619
; Patent No. 6653292
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  TITLE OF INVENTION: Methods of Treating Cancer Using
;  TITLE OF INVENTION: Immunostimulatory Oligonucleotides
;  FILE REFERENCE: C1039/7021/HCL
;  CURRENT APPLICATION NUMBER: US/09/337,619
;  CURRENT FILING DATE: 1999-06-21
;  EARLIER APPLICATION NUMBER: US 08/960,774
;  EARLIER FILING DATE: 1997-10-30
;  EARLIER APPLICATION NUMBER: US 08/738,652
;  EARLIER FILING DATE: 1996-10-30
;  EARLIER APPLICATION NUMBER: US 08/386,063
;  EARLIER FILING DATE: 1995-02-07
;  EARLIER APPLICATION NUMBER: US 08/276,358
;  EARLIER FILING DATE: 1994-07-15
;  NUMBER OF SEQ ID NOS: 123
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 38
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Oligonucleotide
US-09-337-619-38

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGTTCCTGATGCT 20


RESULT 13
US-09-965-101-71
; Sequence 71, Application US/09965101
; Patent No. 6821957
; GENERAL INFORMATION:
;  APPLICANT: Davis, Heather L.
;  APPLICANT:  Krieg, Arthur M.
;  APPLICANT:  Schorr, Joachim
;  APPLICANT:  Wu, Tong
;  TITLE OF INVENTION: Vectors and Methods for Immunization or
;  TITLE OF INVENTION:  Therapeutic Protocols
;  FILE REFERENCE: C1039/7057 (HCL/MAT)
;  CURRENT APPLICATION NUMBER: US/09/965,101
;  CURRENT FILING DATE:  2001-09-26
;  PRIOR APPLICATION NUMBER: US 09/082,649
;  PRIOR FILING DATE: 1998-05-20
;  PRIOR APPLICATION NUMBER: US 60/047,233
;  PRIOR FILING DATE: 1997-05-20
;  PRIOR APPLICATION NUMBER: US 60/047,209
;  PRIOR FILING DATE: 1997-05-20
;  NUMBER OF SEQ ID NOS: 84
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 71
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
```

; OTHER INFORMATION: synthetic oligonucleotide
US-09-965-101-71

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGTTCCTGATGCT 20

RESULT 14
US-09-495-947-4
; Sequence 4, Application US/09495947
; Patent No. 6887464
; GENERAL INFORMATION:
; APPLICANT: Coleman, Timothy P.
; APPLICANT: Peterson, Darrell L.
; TITLE OF INVENTION: Advanced Antigen Presentation Platform
; FILE REFERENCE: 05270001ta
; CURRENT APPLICATION NUMBER: US/09/495,947
; CURRENT FILING DATE: 2000-02-02
; PRIOR APPLICATION NUMBER: US 60/118,526
; PRIOR FILING DATE: 1999-02-02
; NUMBER OF SEQ ID NOS: 24
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:
; OTHER INFORMATION: immunostimulating oligonucleotides
US-09-495-947-4

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGTTCCTGATGCT 20

RESULT 15
US-09-954-987B-96
; Sequence 96, Application US/09954987B
; Patent No. 6943240
; GENERAL INFORMATION:
; APPLICANT: Stefan Bauer
; APPLICANT: Grayson B. Lipford
; APPLICANT: Hermann Wagner
; TITLE OF INVENTION: PROCESS FOR HIGH THROUGHPUT SCREENING OF
; TITLE OF INVENTION: CpG-BASED IMMUNO-AGONIST/ANTAGONIST
; FILE REFERENCE: C1041/7016 (AWS)
; CURRENT APPLICATION NUMBER: US/09/954,987B
; CURRENT FILING DATE: 2001-09-17
; PRIOR APPLICATION NUMBER: US 60/233,035
; PRIOR FILING DATE: 2000-09-15
; PRIOR APPLICATION NUMBER: US 60/263,657
; PRIOR FILING DATE: 2001-01-23
; PRIOR APPLICATION NUMBER: US 60/291,726
; PRIOR FILING DATE: 2001-05-17
; PRIOR APPLICATION NUMBER: US 60/300,210
; PRIOR FILING DATE: 2001-06-22
; NUMBER OF SEQ ID NOS: 230
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 96
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-09-954-987B-96

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGTTCCTGATGCT 20

Search completed: April 17, 2006, 18:04:52
Job time : 56.375 secs

This Page Blank (uspto)

GenCore version 5.1.7

OM nucleic - nucleic search, using sw model

Run on: April 17, 2006, 17:32:13 ; Search time 366.375 Seconds
(without alignments)
451.416 Million cell updates/sec

Title: US-09-818-918-43
Perfect score: 20
Sequence: 1 tccatgtcgttcctgatgct 20

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 9793542 seqs, 4134689005 residues

Total number of hits satisfying chosen parameters: 19587084

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_NA_Main:*
1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
2: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
3: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*
4: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:*
5: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
6: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
7: /cgn2_6/ptodata/1/pubpna/US10C_PUBCOMB.seq:*
8: /cgn2_6/ptodata/1/pubpna/US10D_PUBCOMB.seq:*
9: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq:*
10: /cgn2_6/ptodata/1/pubpna/US11_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
	1	20	100.0	20	3	US-09-824-468-48	Sequence 48, Appl
	2	20	100.0	20	3	US-09-824-468-56	Sequence 56, Appl
	3	20	100.0	20	3	US-09-824-468-57	Sequence 57, Appl
	4	20	100.0	20	3	US-09-800-266A-49	Sequence 49, Appl
	5	20	100.0	20	3	US-09-895-007A-49	Sequence 49, Appl
	6	20	100.0	20	3	US-09-920-313-49	Sequence 49, Appl
c	7	20	100.0	20	3	US-09-888-326-62	Sequence 62, Appl
	8	20	100.0	20	3	US-09-888-326-611	Sequence 611, App
	9	20	100.0	20	3	US-09-818-918-43	Sequence 43, Appl
	10	20	100.0	20	3	US-09-818-918-53	Sequence 53, Appl
	11	20	100.0	20	3	US-09-931-583-57	Sequence 57, Appl
c	12	20	100.0	20	3	US-09-776-479-136	Sequence 136, App
	13	20	100.0	20	3	US-09-776-479-759	Sequence 759, App
	14	20	100.0	20	3	US-09-954-987B-96	Sequence 96, Appl
	15	20	100.0	20	3	US-09-967-464-6	Sequence 6, Appli
	16	20	100.0	20	3	US-09-874-991C-43	Sequence 43, Appl
	17	20	100.0	20	3	US-09-874-991C-109	Sequence 109, App
	18	20	100.0	20	3	US-09-874-991C-132	Sequence 132, App
	19	20	100.0	20	3	US-09-874-991C-160	Sequence 160, App
	20	20	100.0	20	3	US-09-874-991C-181	Sequence 181, App
	21	20	100.0	20	3	US-09-874-991C-206	Sequence 206, App
	22	20	100.0	20	3	US-09-874-991C-422	Sequence 422, App
	23	20	100.0	20	3	US-09-874-991C-441	Sequence 441, App
c	24	20	100.0	20	3	US-09-776-479-136	Sequence 136, App
	25	20	100.0	20	3	US-09-776-479-759	Sequence 759, App
	26	20	100.0	20	3	US-09-965-101-71	Sequence 71, Appl
	27	20	100.0	20	5	US-10-023-909A-49	Sequence 49, Appl
	28	20	100.0	20	5	US-10-074-956-2	Sequence 2, Appli
	29	20	100.0	20	5	US-10-112-653-8	Sequence 8, Appli
c	30	20	100.0	20	5	US-10-112-653-129	Sequence 129, App
	31	20	100.0	20	5	US-10-112-653-732	Sequence 732, App
c	32	20	100.0	20	5	US-10-017-995-136	Sequence 136, App
	33	20	100.0	20	5	US-10-017-995-759	Sequence 759, App
	34	20	100.0	20	5	US-10-300-247-49	Sequence 49, Appl
	35	20	100.0	20	5	US-10-161-229-43	Sequence 43, Appl
	36	20	100.0	20	6	US-10-187-264A-38	Sequence 38, Appl
	37	20	100.0	20	6	US-10-265-072-94	Sequence 94, Appl
	38	20	100.0	20	6	US-10-306-522-38	Sequence 38, Appl
c	39	20	100.0	20	6	US-10-314-578-136	Sequence 136, App
	40	20	100.0	20	6	US-10-314-578-759	Sequence 759, App
	41	20	100.0	20	6	US-10-434-696-49	Sequence 49, Appl
	42	20	100.0	20	7	US-10-373-381-43	Sequence 43, Appl
	43	20	100.0	20	7	US-10-373-381-44	Sequence 44, Appl
	44	20	100.0	20	7	US-10-719-493-38	Sequence 38, Appl
	45	20	100.0	20	7	US-10-627-331-38	Sequence 38, Appl

ALIGNMENTS

RESULT 1
US-09-824-468-48
; Sequence 48, Application US/09824468
; Patent No. US20020064515A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Weiner, George
; TITLE OF INVENTION: Methods and Products for Stimulating the
; TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
; TITLE OF INVENTION: Cytokines
; FILE REFERENCE: C1039/7026/HCL
; CURRENT APPLICATION NUMBER: US/09/824,468
; CURRENT FILING DATE: 2001-04-02
; PRIOR APPLICATION NUMBER: 09/286,098
; PRIOR FILING DATE: 1999-04-02
; NUMBER OF SEQ ID NOS: 105
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 48
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-824-468-48

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.4;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGTTCCTGATGCT 20

RESULT 2
US-09-824-468-56
; Sequence 56, Application US/09824468
; Patent No. US20020064515A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Weiner, George
; TITLE OF INVENTION: Methods and Products for Stimulating the
; TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
; TITLE OF INVENTION: Cytokines
; FILE REFERENCE: C1039/7026/HCL
; CURRENT APPLICATION NUMBER: US/09/824,468

; CURRENT FILING DATE: 2001-04-02
; PRIOR APPLICATION NUMBER: 09/286,098
; PRIOR FILING DATE: 1999-04-02
; NUMBER OF SEQ ID NOS: 105
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 56
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-824-468-56

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.4;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGTTCCTGATGCT 20

RESULT 3
US-09-824-468-57
; Sequence 57, Application US/09824468
; Patent No. US20020064515A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Weiner, George
; TITLE OF INVENTION: Methods and Products for Stimulating the
; TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
; TITLE OF INVENTION: Cytokines
; FILE REFERENCE: C1039/7026/HCL
; CURRENT APPLICATION NUMBER: US/09/824,468
; CURRENT FILING DATE: 2001-04-02
; PRIOR APPLICATION NUMBER: 09/286,098
; PRIOR FILING DATE: 1999-04-02
; NUMBER OF SEQ ID NOS: 105
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 57
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
; NAME/KEY: modified_base
; LOCATION: (8)...(8)
; OTHER INFORMATION: m5c
US-09-824-468-57

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.4;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGTTCCTGATGCT 20

RESULT 4
US-09-800-266A-49
; Sequence 49, Application US/09800266A
; Patent No. US20020156033A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids and
; TITLE OF INVENTION: Cancer Medicament Combination Therapy for the Treatment of
; TITLE OF INVENTION: Cancer
; FILE REFERENCE: C1037/7017(HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/800,266A
; CURRENT FILING DATE: 2001-03-05
; PRIOR APPLICATION NUMBER: US 60/187,214
; PRIOR FILING DATE: 2000-03-03
; NUMBER OF SEQ ID NOS: 146
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 49
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-800-266A-49

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.4;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGTTCCTGATGCT 20

RESULT 5
US-09-895-007A-49
; Sequence 49, Application US/09895007A
; Patent No. US20020165178A1
; GENERAL INFORMATION:
; APPLICANT: Schetter, Christian
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACIDS FOR THE
; TITLE OF INVENTION: TREATMENT OF ANEMIA, THROMBOCYTOPENIA, AND NEUTROPENIA
; FILE REFERENCE: C1041/7014 (AWS)
; CURRENT APPLICATION NUMBER: US/09/895,007A
; CURRENT FILING DATE: 2001-06-28
; PRIOR APPLICATION NUMBER: US 60/214,368
; PRIOR FILING DATE: 2000-06-28
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 49
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-09-895-007A-49

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.4;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGTTCCTGATGCT 20

RESULT 6
US-09-920-313-49
; Sequence 49, Application US/09920313
; Publication No. US20020198165A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; TITLE OF INVENTION: Nucleic Acids for the Prevention and
; TITLE OF INVENTION: Treatment of Gastric Ulcers
; FILE REFERENCE: C1037/7019 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/920,313
; CURRENT FILING DATE: 2001-08-01
; PRIOR APPLICATION NUMBER: US 60/222,248
; PRIOR FILING DATE: 2001-08-08
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 49
; LENGTH: 20
; TYPE: DNA

```
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Sequence
US-09-920-313-49

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 5.4;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGTTCCTGATGCT 20


RESULT 7
US-09-888-326-62/c
; Sequence 62, Application US/09888326
; Publication No. US20030026801A1
; GENERAL INFORMATION:
;  APPLICANT: Weiner, George
;  APPLICANT:  Hartmann, Gunther
;  TITLE OF INVENTION: Methods for Enhancing Antibody-Induced
;  TITLE OF INVENTION:  Cell Lysis and Treating Cancer
;  FILE REFERENCE: C1039/7052 (AWS)
;  CURRENT APPLICATION NUMBER: US/09/888,326
;  CURRENT FILING DATE:  2001-06-22
;  PRIOR APPLICATION NUMBER: US 60/213,346
;  PRIOR FILING DATE: 2000-06-22
;  NUMBER OF SEQ ID NOS: 848
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 62
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
;   NAME/KEY: misc_feature
;   LOCATION: (0)...(0)
;   OTHER INFORMATION: phosphodiester backbone
US-09-888-326-62

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 5.4;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGTTCCTGATGCT 20
              ||||||||||||||||||||
Db         20 TCCATGTCGTTCCTGATGCT 1


RESULT 8
US-09-888-326-611
; Sequence 611, Application US/09888326
; Publication No. US20030026801A1
; GENERAL INFORMATION:
;  APPLICANT: Weiner, George
;  APPLICANT:  Hartmann, Gunther
;  TITLE OF INVENTION: Methods for Enhancing Antibody-Induced
;  TITLE OF INVENTION:  Cell Lysis and Treating Cancer
;  FILE REFERENCE: C1039/7052 (AWS)
;  CURRENT APPLICATION NUMBER: US/09/888,326
;  CURRENT FILING DATE:  2001-06-22
;  PRIOR APPLICATION NUMBER: US 60/213,346
;  PRIOR FILING DATE: 2000-06-22
;  NUMBER OF SEQ ID NOS: 848
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 611
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
;   NAME/KEY: misc_feature
;   LOCATION: (0)...(0)
;   OTHER INFORMATION: phosphodiester backbone
US-09-888-326-611

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 5.4;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGTTCCTGATGCT 20


RESULT 9
US-09-818-918-43
; Sequence 43, Application US/09818918
; Publication No. US20030050261A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Kline, Joel N.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7048 (AWS)
;  CURRENT APPLICATION NUMBER: US/09/818,918
;  CURRENT FILING DATE:  2001-03-27
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  NUMBER OF SEQ ID NOS: 56
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 43
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-09-818-918-43

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 5.4;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGTTCCTGATGCT 20


RESULT 10
US-09-818-918-53
; Sequence 53, Application US/09818918
; Publication No. US20030050261A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Kline, Joel N.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7048 (AWS)
;  CURRENT APPLICATION NUMBER: US/09/818,918
;  CURRENT FILING DATE:  2001-03-27
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  NUMBER OF SEQ ID NOS: 56
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 53
```

; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
; NAME/KEY: modified_base
; LOCATION: (8)...(8)
; OTHER INFORMATION: m5c
US-09-818-918-53

  Query Match 100.0%; Score 20; DB 3; Length 20;
  Best Local Similarity 100.0%; Pred. No. 5.4;
  Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGTTCCTGATGCT 20
      ||||||||||||||||||||
Db 1 TCCATGTCGTTCCTGATGCT 20

RESULT 11
US-09-931-583-57
; Sequence 57, Application US/09931583
; Publication No. US20030050263A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred
; TITLE OF INVENTION: Methods and Products for Treating HIV Infection
; FILE REFERENCE: C1039/7053(HCL)
; CURRENT APPLICATION NUMBER: US/09/931,583
; CURRENT FILING DATE: 2001-08-16
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 09/415,142
; PRIOR FILING DATE: 1999-10-09
; NUMBER OF SEQ ID NOS: 75
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 57
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: Synthetic Oligonucleotide
US-09-931-583-57

  Query Match 100.0%; Score 20; DB 3; Length 20;
  Best Local Similarity 100.0%; Pred. No. 5.4;
  Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGTTCCTGATGCT 20
      ||||||||||||||||||||
Db 1 TCCATGTCGTTCCTGATGCT 20

RESULT 12
US-09-776-479-136/c
; Sequence 136, Application US/09776479
; Publication No. US20030087848A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; TITLE OF INVENTION: Treatment of Asthma and Allergy
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; CURRENT FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 136
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-136

  Query Match 100.0%; Score 20; DB 3; Length 20;
  Best Local Similarity 100.0%; Pred. No. 5.4;
  Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGTTCCTGATGCT 20
      ||||||||||||||||||||
Db 20 TCCATGTCGTTCCTGATGCT 1

RESULT 13
US-09-776-479-759
; Sequence 759, Application US/09776479
; Publication No. US20030087848A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; TITLE OF INVENTION: Treatment of Asthma and Allergy
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; CURRENT FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 759
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-759

  Query Match 100.0%; Score 20; DB 3; Length 20;
  Best Local Similarity 100.0%; Pred. No. 5.4;
  Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGTTCCTGATGCT 20
      ||||||||||||||||||||
Db 1 TCCATGTCGTTCCTGATGCT 20

RESULT 14
US-09-954-987B-96
; Sequence 96, Application US/09954987B
; Publication No. US20030104523A1
; GENERAL INFORMATION:
; APPLICANT: Stefan Bauer
; APPLICANT: Grayson B. Lipford
; APPLICANT: Hermann Wagner
; TITLE OF INVENTION: PROCESS FOR HIGH THROUGHPUT SCREENING OF
; TITLE OF INVENTION: CpG-BASED IMMUNO-AGONIST/ANTAGONIST
; FILE REFERENCE: C1041/7016 (AWS)
; CURRENT APPLICATION NUMBER: US/09/954,987B
; CURRENT FILING DATE: 2001-09-17
; PRIOR APPLICATION NUMBER: US 60/233,035
; PRIOR FILING DATE: 2000-09-15
; PRIOR APPLICATION NUMBER: US 60/263,657
; PRIOR FILING DATE: 2001-01-23
; PRIOR APPLICATION NUMBER: US 60/291,726
; PRIOR FILING DATE: 2001-05-17
; PRIOR APPLICATION NUMBER: US 60/300,210
; PRIOR FILING DATE: 2001-06-22
; NUMBER OF SEQ ID NOS: 230
; SOFTWARE: FastSEQ for Windows Version 3.0

; SEQ ID NO 96
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-09-954-987B-96

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.4;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 TCCATGTCGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGTTCCTGATGCT 20
```

RESULT 15
US-09-967-464-6
; Sequence 6, Application US/09967464
; Publication No. US20030138453A1
; GENERAL INFORMATION:
; APPLICANT: O'Hagan, Derek
; APPLICANT: Otten, Gillis
; APPLICANT: Donnelly, John J.
; APPLICANT: Polo, John M.
; APPLICANT: Barnett, Susan
; APPLICANT: Singh, Mamohan
; APPLICANT: Ulmer, Jeffrey
; APPLICANT: Dubensky, Jr., Thomas W.
; TITLE OF INVENTION: MICROPARTICLES FOR DELIVERY OF HETEROLOGOUS NUCLEIC ACIDS
; FILE REFERENCE: PP16269.004
; CURRENT APPLICATION NUMBER: US/09/967,464
; CURRENT FILING DATE: 2002-04-11
; PRIOR APPLICATION NUMBER: 60/236,105
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: 60/315,905
; PRIOR FILING DATE: 2001-08-30
; NUMBER OF SEQ ID NOS: 68
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 6
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Artificial sequence is synthesized
US-09-967-464-6

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.4;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 TCCATGTCGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGTTCCTGATGCT 20
```

Search completed: April 17, 2006, 20:43:34
Job time : 367.5 secs

GenCore version 5.1.7

OM nucleic - nucleic search, using sw model

Run on: April 17, 2006, 17:33:01 ; Search time 425 Seconds
(without alignments)
189.545 Million cell updates/sec

Title: US-09-818-918-43
Perfect score: 20
Sequence: 1 tccatgtcgttcctgatgct 20

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 9281099 seqs, 2013915447 residues

Total number of hits satisfying chosen parameters: 18562198

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_NA_New:*
1: /SIDS5/ptodata/1/pubpna/US08_NEW_PUB.seq:*
2: /SIDS5/ptodata/1/pubpna/US06_NEW_PUB.seq:*
3: /SIDS5/ptodata/1/pubpna/US07_NEW_PUB.seq:*
4: /SIDS5/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
5: /SIDS5/ptodata/1/pubpna/US09_NEW_PUB.seq:*
6: /SIDS5/ptodata/1/pubpna/US09_NEW_PUB.seq1:*
7: /SIDS5/ptodata/1/pubpna/US10_NEW_PUB.seq:*
8: /SIDS5/ptodata/1/pubpna/US10_NEW_PUB.seq1:*
9: /SIDS5/ptodata/1/pubpna/US10_NEW_PUB.seq2:*
10: /SIDS5/ptodata/1/pubpna/US10_NEW_PUB.seq3:*
11: /SIDS5/ptodata/1/pubpna/US11_NEW_PUB.seq:*
12: /SIDS5/ptodata/1/pubpna/US11_NEW_PUB.seq2:*
13: /SIDS5/ptodata/1/pubpna/US11_NEW_PUB.seq3:*
14: /SIDS5/ptodata/1/pubpna/US11_NEW_PUB.seq4:*
15: /SIDS5/ptodata/1/pubpna/US60_NEW_PUB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	20	100.0	20	8	US-10-619-279-38	Sequence 38, Appl
2	20	100.0	20	8	US-10-435-656-43	Sequence 43, Appl
3	20	100.0	20	8	US-10-435-656-53	Sequence 53, Appl
4	20	100.0	20	9	US-10-533-634-30	Sequence 30, Appl
5	20	100.0	20	10	US-10-382-822-38	Sequence 38, Appl
6	20	100.0	20	14	US-11-127-654-8	Sequence 8, Appli
c 7	20	100.0	20	14	US-11-127-654-129	Sequence 129, App
8	20	100.0	20	14	US-11-127-654-732	Sequence 732, App
9	20	100.0	20	14	US-11-134-918-43	Sequence 43, Appl
10	20	100.0	20	14	US-11-134-918-53	Sequence 53, Appl
11	20	100.0	20	14	US-11-031-460-43	Sequence 43, Appl
12	20	100.0	20	14	US-11-031-460-53	Sequence 53, Appl
13	20	100.0	20	14	US-11-019-955-2	Sequence 2, Appli
14	20	100.0	20	14	US-11-067-587-43	Sequence 43, Appl
15	20	100.0	20	14	US-11-067-587-53	Sequence 53, Appl
16	20	100.0	20	14	US-11-099-683-101	Sequence 101, App
17	20	100.0	20	14	US-11-099-683-102	Sequence 102, App
18	20	100.0	20	14	US-11-099-683-103	Sequence 103, App
19	20	100.0	28	14	US-11-127-654-306	Sequence 306, App
20	19	95.0	20	8	US-10-497-591A-73	Sequence 73, Appl
21	19	95.0	20	8	US-10-619-279-44	Sequence 44, Appl
22	19	95.0	20	10	US-10-382-822-44	Sequence 44, Appl
23	19	95.0	20	14	US-11-127-654-185	Sequence 185, App
24	19	95.0	20	14	US-11-099-683-105	Sequence 105, App
25	18.4	92.0	20	8	US-10-497-591A-12	Sequence 12, Appl
26	18.4	92.0	20	8	US-10-469-561-9	Sequence 9, Appli
27	18.4	92.0	20	8	US-10-619-279-7	Sequence 7, Appli
28	18.4	92.0	20	8	US-10-619-279-28	Sequence 28, Appl
29	18.4	92.0	20	8	US-10-619-279-36	Sequence 36, Appl
30	18.4	92.0	20	8	US-10-619-279-37	Sequence 37, Appl
31	18.4	92.0	20	8	US-10-435-656-7	Sequence 7, Appli
32	18.4	92.0	20	8	US-10-435-656-31	Sequence 31, Appl
33	18.4	92.0	20	8	US-10-435-656-33	Sequence 33, Appl
34	18.4	92.0	20	8	US-10-435-656-34	Sequence 34, Appl
35	18.4	92.0	20	8	US-10-435-656-35	Sequence 35, Appl
36	18.4	92.0	20	8	US-10-435-656-37	Sequence 37, Appl
37	18.4	92.0	20	8	US-10-435-656-41	Sequence 41, Appl
38	18.4	92.0	20	8	US-10-435-656-42	Sequence 42, Appl
39	18.4	92.0	20	8	US-10-435-656-44	Sequence 44, Appl
40	18.4	92.0	20	8	US-10-435-656-54	Sequence 54, Appl
41	18.4	92.0	20	9	US-10-533-634-29	Sequence 29, Appl
42	18.4	92.0	20	10	US-10-382-822-7	Sequence 7, Appli
43	18.4	92.0	20	10	US-10-382-822-28	Sequence 28, Appl
44	18.4	92.0	20	10	US-10-382-822-36	Sequence 36, Appl
45	18.4	92.0	20	10	US-10-382-822-37	Sequence 37, Appl

ALIGNMENTS

RESULT 1
US-10-619-279-38
; Sequence 38, Application US/10619279
; Publication No. US20050267057A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7023/HCL
; CURRENT APPLICATION NUMBER: US/10/619,279
; CURRENT FILING DATE: 2003-07-14
; PRIOR APPLICATION NUMBER: US 08/960,774
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 123
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 38
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-619-279-38

Query Match 100.0%; Score 20; DB 8; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.2;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 TCCATGTCGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGTTCCTGATGCT 20
```

RESULT 2
US-10-435-656-43
; Sequence 43, Application US/10435656
; Publication No. US20050277604A1

; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AWS)
; CURRENT APPLICATION NUMBER: US/10/435,656
; CURRENT FILING DATE: 2003-05-09
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 43
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-10-435-656-43

Query Match 100.0%; Score 20; DB 8; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.2;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGTTCCTGATGCT 20

RESULT 3
US-10-435-656-53
; Sequence 53, Application US/10435656
; Publication No. US20050277604A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AWS)
; CURRENT APPLICATION NUMBER: US/10/435,656
; CURRENT FILING DATE: 2003-05-09
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 53
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (8)...(8)
; OTHER INFORMATION: m5c
US-10-435-656-53

Query Match 100.0%; Score 20; DB 8; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.2;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGTTCCTGATGCT 20

RESULT 4
US-10-533-634-30
; Sequence 30, Application US/10533634
; Publication No. US20060019239A1
; GENERAL INFORMATION:
; APPLICANT: THE UNITED STATES OF AMERICA AS REPRESENTED BY THE
; APPLICANT: SECRETARY OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES
; APPLICANT: Klinman, Dennis M.
; APPLICANT: Ivins, Bruce
; APPLICANT: Verthelyi, Daniela
; TITLE OF INVENTION: METHOD OF PREVENTING INFECTIONS FROM BIOTERRORISM AGENTS WITH
; TITLE OF INVENTION: IMMUNOSTIMULATORY CpG OLIGONUCLEOTIDES
; FILE REFERENCE: 4239-67021-06
; CURRENT APPLICATION NUMBER: US/10/533,634
; CURRENT FILING DATE: 2005-04-29
; PRIOR APPLICATION NUMBER: PCT/US2003/034523
; PRIOR FILING DATE: 2003-10-31
; PRIOR APPLICATION NUMBER: US 60/422,964
; PRIOR FILING DATE: 2002-11-01
; NUMBER OF SEQ ID NOS: 199
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 30
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: K oligonucleotide
US-10-533-634-30

Query Match 100.0%; Score 20; DB 9; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.2;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGTTCCTGATGCT 20

RESULT 5
US-10-382-822-38
; Sequence 38, Application US/10382822
; Publication No. US20060058251A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Methods for Treating and Preventing
; TITLE OF INVENTION: Infectious Disease
; FILE REFERENCE: C01039.70062.US
; CURRENT APPLICATION NUMBER: US/10/382,822
; CURRENT FILING DATE: 2003-03-06
; PRIOR APPLICATION NUMBER: US 09/630,319
; PRIOR FILING DATE: 2000-07-31
; PRIOR APPLICATION NUMBER: US 08/960,774
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 124
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 38
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-382-822-38

```
  Query Match             100.0%;  Score 20;  DB 10;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.2;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGTTCCTGATGCT 20


RESULT 6
US-11-127-654-8
; Sequence 8, Application US/11127654
; Publication No. US20050250726A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Berg, Daniel J.
;  TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
;  TITLE OF INVENTION:  INFLAMMATORY DISEASES
;  FILE REFERENCE: C1039.70060US01
;  CURRENT APPLICATION NUMBER: US/11/127,654
;  CURRENT FILING DATE:  2005-05-12
;  PRIOR APPLICATION NUMBER: US 10/112,653
;  PRIOR FILING DATE: 2002-03-29
;  PRIOR APPLICATION NUMBER: US 60/279,642
;  PRIOR FILING DATE: 2001-03-29
;  NUMBER OF SEQ ID NOS: 1040
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 8
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
;   FEATURE:
;   NAME/KEY: modified_base
;   LOCATION: (8)..(8)
;   OTHER INFORMATION: m5c
US-11-127-654-8

  Query Match             100.0%;  Score 20;  DB 14;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.2;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGTTCCTGATGCT 20


RESULT 7
US-11-127-654-129/c
; Sequence 129, Application US/11127654
; Publication No. US20050250726A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Berg, Daniel J.
;  TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
;  TITLE OF INVENTION:  INFLAMMATORY DISEASES
;  FILE REFERENCE: C1039.70060US01
;  CURRENT APPLICATION NUMBER: US/11/127,654
;  CURRENT FILING DATE:  2005-05-12
;  PRIOR APPLICATION NUMBER: US 10/112,653
;  PRIOR FILING DATE: 2002-03-29
;  PRIOR APPLICATION NUMBER: US 60/279,642
;  PRIOR FILING DATE: 2001-03-29
;  NUMBER OF SEQ ID NOS: 1040
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 129
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-11-127-654-129

  Query Match             100.0%;  Score 20;  DB 14;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.2;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGTTCCTGATGCT 20
              ||||||||||||||||||||
Db         20 TCCATGTCGTTCCTGATGCT 1


RESULT 8
US-11-127-654-732
; Sequence 732, Application US/11127654
; Publication No. US20050250726A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Berg, Daniel J.
;  TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
;  TITLE OF INVENTION:  INFLAMMATORY DISEASES
;  FILE REFERENCE: C1039.70060US01
;  CURRENT APPLICATION NUMBER: US/11/127,654
;  CURRENT FILING DATE:  2005-05-12
;  PRIOR APPLICATION NUMBER: US 10/112,653
;  PRIOR FILING DATE: 2002-03-29
;  PRIOR APPLICATION NUMBER: US 60/279,642
;  PRIOR FILING DATE: 2001-03-29
;  NUMBER OF SEQ ID NOS: 1040
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 732
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-11-127-654-732

  Query Match             100.0%;  Score 20;  DB 14;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.2;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGTTCCTGATGCT 20


RESULT 9
US-11-134-918-43
; Sequence 43, Application US/11134918
; Publication No. US20050267064A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Kline, Joel N.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7048 (AWS)
;  CURRENT APPLICATION NUMBER: US/11/134,918
;  CURRENT FILING DATE:  2005-05-23
;  PRIOR APPLICATION NUMBER: US/09/818,918
;  PRIOR FILING DATE: 2001-03-27
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  NUMBER OF SEQ ID NOS: 56
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 43
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
```

```
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-11-134-918-43

  Query Match             100.0%;  Score 20;  DB 14;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.2;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGTTCCTGATGCT 20


RESULT 10
US-11-134-918-53
; Sequence 53, Application US/11134918
; Publication No. US20050267064A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Kline, Joel N.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7048 (AWS)
;  CURRENT APPLICATION NUMBER: US/11/134,918
;  CURRENT FILING DATE:  2005-05-23
;  PRIOR APPLICATION NUMBER: US/09/818,918
;  PRIOR FILING DATE: 2001-03-27
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  NUMBER OF SEQ ID NOS: 56
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 53
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
;   FEATURE:
;   NAME/KEY: modified_base
;   LOCATION: (8)...(8)
;   OTHER INFORMATION: m5c
US-11-134-918-53

  Query Match             100.0%;  Score 20;  DB 14;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.2;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGTTCCTGATGCT 20


RESULT 11
US-11-031-460-43
; Sequence 43, Application US/11031460
; Publication No. US20050277609A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Kline, Joel N.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7048 (AWS)
;  CURRENT APPLICATION NUMBER: US/11/031,460
;  CURRENT FILING DATE:  2005-01-07
;  PRIOR APPLICATION NUMBER: US/09/818,918
;  PRIOR FILING DATE: 2001-03-27
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  NUMBER OF SEQ ID NOS: 56
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 43
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-11-031-460-43

  Query Match             100.0%;  Score 20;  DB 14;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.2;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGTTCCTGATGCT 20


RESULT 12
US-11-031-460-53
; Sequence 53, Application US/11031460
; Publication No. US20050277609A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Kline, Joel N.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7048 (AWS)
;  CURRENT APPLICATION NUMBER: US/11/031,460
;  CURRENT FILING DATE:  2005-01-07
;  PRIOR APPLICATION NUMBER: US/09/818,918
;  PRIOR FILING DATE: 2001-03-27
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  NUMBER OF SEQ ID NOS: 56
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 53
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
;   FEATURE:
;   NAME/KEY: modified_base
;   LOCATION: (8)...(8)
;   OTHER INFORMATION: m5c
US-11-031-460-53

  Query Match             100.0%;  Score 20;  DB 14;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.2;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGTCGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGTCGTTCCTGATGCT 20


RESULT 13
US-11-019-955-2
; Sequence 2, Application US/11019955
; Publication No. US20050282763A1
; GENERAL INFORMATION:
```

; APPLICANT: Hedley, Mary Lynne
; TITLE OF INVENTION: METHODS OF TREATING BLADDER DISORDERS
; FILE REFERENCE: 08191-022001
; CURRENT APPLICATION NUMBER: US/11/019,955
; CURRENT FILING DATE: 2004-12-22
; PRIOR APPLICATION NUMBER: US/10/074,956
; PRIOR FILING DATE: 2002-02-12
; PRIOR APPLICATION NUMBER: 60/268,175
; PRIOR FILING DATE: 2001-02-12
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Homo sapiens
US-11-019-955-2

Query Match 100.0%; Score 20; DB 14; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.2;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGTTCCTGATGCT 20

RESULT 14
US-11-067-587-43
; Sequence 43, Application US/11067587
; Publication No. US20060003955A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AWS)
; CURRENT APPLICATION NUMBER: US/11/067,587
; CURRENT FILING DATE: 2005-02-25
; PRIOR APPLICATION NUMBER: US/09/818,918
; PRIOR FILING DATE: 2001-03-27
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 43
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-067-587-43

Query Match 100.0%; Score 20; DB 14; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.2;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGTTCCTGATGCT 20

RESULT 15
US-11-067-587-53
; Sequence 53, Application US/11067587
; Publication No. US20060003955A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AWS)
; CURRENT APPLICATION NUMBER: US/11/067,587
; CURRENT FILING DATE: 2005-02-25
; PRIOR APPLICATION NUMBER: US/09/818,918
; PRIOR FILING DATE: 2001-03-27
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 53
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (8)...(8)
; OTHER INFORMATION: m5c
US-11-067-587-53

Query Match 100.0%; Score 20; DB 14; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.2;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGTCGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGTCGTTCCTGATGCT 20

Search completed: April 17, 2006, 18:51:09
Job time : 425.125 secs

GenCore version 5.1.7

OM nucleic - nucleic search, using sw model

Run on: April 17, 2006, 14:43:57 ; Search time 56.375 Seconds
(without alignments)
630.621 Million cell updates/sec

Title: US-09-818-918-44
Perfect score: 20
Sequence: 1 tccatgacgttcctgatgct 20

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 1303057 seqs, 888780828 residues

Total number of hits satisfying chosen parameters: 2606114

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_NA:*
1: /cgn2_6/ptodata/1/ina/1_COMB.seq:*
2: /cgn2_6/ptodata/1/ina/5_COMB.seq:*
3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/1/ina/H_COMB.seq:*
6: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
7: /cgn2_6/ptodata/1/ina/PP_COMB.seq:*
8: /cgn2_6/ptodata/1/ina/RE_COMB.seq:*
9: /cgn2_6/ptodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	20	100.0	20	2	US-09-133-774-11	Sequence 11, Appl
2	20	100.0	20	3	US-08-386-063-25	Sequence 25, Appl
3	20	100.0	20	3	US-09-303-862-11	Sequence 11, Appl
4	20	100.0	20	3	US-08-386-063-25	Sequence 25, Appl
5	20	100.0	20	3	US-08-738-652-7	Sequence 7, Appli
6	20	100.0	20	3	US-08-738-652-35	Sequence 35, Appl
7	20	100.0	20	3	US-08-738-652-44	Sequence 44, Appl
8	20	100.0	20	3	US-08-738-652-54	Sequence 54, Appl
9	20	100.0	20	3	US-09-286-098-24	Sequence 24, Appl
10	20	100.0	20	3	US-08-960-774-7	Sequence 7, Appli
11	20	100.0	20	3	US-09-082-649B-68	Sequence 68, Appl
12	20	100.0	20	3	US-09-082-649B-79	Sequence 79, Appl
13	20	100.0	20	3	US-09-325-193A-19	Sequence 19, Appl
14	20	100.0	20	3	US-09-191-170-24	Sequence 24, Appl
15	20	100.0	20	3	US-09-171-425-5	Sequence 5, Appli
16	20	100.0	20	3	US-09-171-425-14	Sequence 14, Appl
17	20	100.0	20	3	US-09-690-921-5	Sequence 5, Appli
18	20	100.0	20	3	US-09-791-500-7	Sequence 7, Appli
19	20	100.0	20	3	US-09-337-619-7	Sequence 7, Appli
20	20	100.0	20	3	US-09-965-101-68	Sequence 68, Appl
21	20	100.0	20	3	US-09-965-101-79	Sequence 79, Appl
22	20	100.0	20	3	US-10-764-718-2	Sequence 2, Appli
23	20	100.0	20	3	US-09-954-987B-84	Sequence 84, Appl
24	20	100.0	20	3	US-09-954-987B-207	Sequence 207, App
25	20	100.0	20	3	US-09-672-126B-84	Sequence 84, Appl
26	20	100.0	29	3	US-08-848-229-2	Sequence 2, Appli
27	20	100.0	29	3	US-09-022-965-2	Sequence 2, Appli
28	19	95.0	19	3	US-09-770-602-1	Sequence 1, Appli
29	19	95.0	19	3	US-09-770-602-2	Sequence 2, Appli
30	19	95.0	19	3	US-09-770-602-3	Sequence 3, Appli
31	19	95.0	19	3	US-09-770-602-4	Sequence 4, Appli
32	19	95.0	19	3	US-09-770-602-5	Sequence 5, Appli
33	19	95.0	19	3	US-09-770-602-6	Sequence 6, Appli
34	19	95.0	19	3	US-09-770-602-7	Sequence 7, Appli
35	19	95.0	19	3	US-09-770-602-8	Sequence 8, Appli
36	18.4	92.0	20	3	US-08-738-652-3	Sequence 3, Appli
37	18.4	92.0	20	3	US-08-738-652-9	Sequence 9, Appli
38	18.4	92.0	20	3	US-08-738-652-40	Sequence 40, Appl
39	18.4	92.0	20	3	US-08-738-652-43	Sequence 43, Appl
40	18.4	92.0	20	3	US-08-738-652-45	Sequence 45, Appl
41	18.4	92.0	20	3	US-08-738-652-46	Sequence 46, Appl
42	18.4	92.0	20	3	US-08-738-652-53	Sequence 53, Appl
43	18.4	92.0	20	3	US-09-030-701-5	Sequence 5, Appli
44	18.4	92.0	20	3	US-09-286-098-45	Sequence 45, Appl
45	18.4	92.0	20	3	US-09-286-098-48	Sequence 48, Appl

ALIGNMENTS

RESULT 1
US-09-133-774-11
; Sequence 11, Application US/09133774B
; Patent No. 5962636
; GENERAL INFORMATION:
; APPLICANT: Bachmaier, Kurt
; APPLICANT: Hessel, Andrew J.
; APPLICANT: Neu M.D., Nikolaus
; APPLICANT: Penninger, Josef M.
; TITLE OF INVENTION: No. 5962636el Peptides Capable of Modulating Inflammatory Heart
; TITLE OF INVENTION: Disease
; FILE REFERENCE: A-536
; CURRENT APPLICATION NUMBER: US/09/133,774B
; CURRENT FILING DATE: 1998-08-12
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 11
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Chlamydia trachomatis
; FEATURE:
; OTHER INFORMATION: An oligonucleotide derived from the DNA encoding a
; OTHER INFORMATION: 60 kDa cysteine rich outer membrane protein from
; OTHER INFORMATION: Chlamydia trachomatis.
US-09-133-774-11

Query Match 100.0%; Score 20; DB 2; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGTTCCTGATGCT 20

RESULT 2
US-08-386-063-25
; Sequence 25, Application US/08386063
; Patent No. 6008200
; GENERAL INFORMATION:
; APPLICANT: Arthur M. Krieg, M.D.
; TITLE OF INVENTION: IMMUNOMODULATORY OLIGONUCLEOTIDES
; NUMBER OF SEQUENCES: 27
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: LAHIVE & COCKFIELD
; STREET: 60 STATE STREET, SUITE 510
; CITY: BOSTON

```
;       STATE:  MASSACHUSETTS
;       COUNTRY:  USA
;       ZIP:  02109-1875
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  ASCII text
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/08/386,063
;       FILING DATE:
;       CLASSIFICATION:  424
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  ARNOLD, BETH E.
;       REGISTRATION NUMBER:  35,430
;       REFERENCE/DOCKET NUMBER:  UIZ-013CP
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (617)227-7400
;       TELEFAX:  (617)227-5941
;   INFORMATION FOR SEQ ID NO:  25:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  20 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  DNA
US-08-386-063-25

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGTTCCTGATGCT 20


RESULT 3
US-09-303-862-11
; Sequence 11, Application US/09303862
; Patent No. 6034230
; GENERAL INFORMATION:
;  APPLICANT: Bachmaier, Kurt
;  APPLICANT: Hessel, Andrew J.
;  APPLICANT: Neu M.D., Nikolaus
;  APPLICANT: Penninger, Josef M.
;  TITLE OF INVENTION: No. 6034230el Peptides Capable of Modulating Inflammatory Heart
;  TITLE OF INVENTION: Disease
;  FILE REFERENCE: A-536
;  CURRENT APPLICATION NUMBER: US/09/303,862
;  CURRENT FILING DATE: 1999-05-03
;  EARLIER APPLICATION NUMBER: 09/133,774
;  EARLIER FILING DATE: 1998-08-12
;  NUMBER OF SEQ ID NOS: 26
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 11
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Chlamydia trachomatis
;   FEATURE:
;   OTHER INFORMATION: An oligonucleotide derived from the DNA encoding a
;   OTHER INFORMATION: 60 kDa cysteine rich outer membrane protein from
;   OTHER INFORMATION: Chlamydia trachomatis.
US-09-303-862-11

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGTTCCTGATGCT 20


RESULT 4
US-08-386-063-25
; Sequence 25, Application US/08386063
; Patent No. 6194388
;  GENERAL INFORMATION:
;    APPLICANT:  Arthur M. Krieg, M.D.
;    TITLE OF INVENTION:  IMMUNOMODULATORY OLIGONUCLEOTIDES
;    NUMBER OF SEQUENCES:  27
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  LAHIVE & COCKFIELD
;      STREET:  60 STATE STREET, SUITE 510
;      CITY:  BOSTON
;      STATE:  MASSACHUSETTS
;      COUNTRY:  USA
;      ZIP:  02109-1875
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  ASCII text
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/386,063
;      FILING DATE:
;      CLASSIFICATION:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  ARNOLD, BETH E.
;      REGISTRATION NUMBER:  35,430
;      REFERENCE/DOCKET NUMBER:  UIZ-013CP
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (617)227-7400
;      TELEFAX:  (617)227-5941
;  INFORMATION FOR SEQ ID NO:  25:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-386-063-25

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGTTCCTGATGCT 20


RESULT 5
US-08-738-652-7
; Sequence 7, Application US/08738652B
; Patent No. 6207646
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7004 HCL
;  CURRENT APPLICATION NUMBER: US/08/738,652B
;  CURRENT FILING DATE: 1996-10-30
;  EARLIER APPLICATION NUMBER: US 08/276,358
;  EARLIER FILING DATE: 1994-07-15
;  EARLIER APPLICATION NUMBER: US 08/386,063
;  EARLIER FILING DATE: 1995-02-07
;  NUMBER OF SEQ ID NOS: 55
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 7
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-08-738-652-7
```

```
  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGTTCCTGATGCT 20


RESULT 6
US-08-738-652-35
; Sequence 35, Application US/08738652B
; Patent No. 6207646
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7004 HCL
;  CURRENT APPLICATION NUMBER: US/08/738,652B
;  CURRENT FILING DATE: 1996-10-30
;  EARLIER APPLICATION NUMBER: US 08/276,358
;  EARLIER FILING DATE: 1994-07-15
;  EARLIER APPLICATION NUMBER: US 08/386,063
;  EARLIER FILING DATE: 1995-02-07
;  NUMBER OF SEQ ID NOS: 55
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 35
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-08-738-652-35

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGTTCCTGATGCT 20


RESULT 7
US-08-738-652-44
; Sequence 44, Application US/08738652B
; Patent No. 6207646
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7004 HCL
;  CURRENT APPLICATION NUMBER: US/08/738,652B
;  CURRENT FILING DATE: 1996-10-30
;  EARLIER APPLICATION NUMBER: US 08/276,358
;  EARLIER FILING DATE: 1994-07-15
;  EARLIER APPLICATION NUMBER: US 08/386,063
;  EARLIER FILING DATE: 1995-02-07
;  NUMBER OF SEQ ID NOS: 55
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 44
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-08-738-652-44

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGTTCCTGATGCT 20


RESULT 8
US-08-738-652-54
; Sequence 54, Application US/08738652B
; Patent No. 6207646
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7004 HCL
;  CURRENT APPLICATION NUMBER: US/08/738,652B
;  CURRENT FILING DATE: 1996-10-30
;  EARLIER APPLICATION NUMBER: US 08/276,358
;  EARLIER FILING DATE: 1994-07-15
;  EARLIER APPLICATION NUMBER: US 08/386,063
;  EARLIER FILING DATE: 1995-02-07
;  NUMBER OF SEQ ID NOS: 55
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 54
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-08-738-652-54

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGTTCCTGATGCT 20


RESULT 9
US-09-286-098-24
; Sequence 24, Application US/09286098
; Patent No. 6218371
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT: Weiner, George
;  TITLE OF INVENTION: Methods and Products for Stimulating the
;  TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
;  TITLE OF INVENTION: Cytokines
;  FILE REFERENCE: C1039/7026/HCL
;  CURRENT APPLICATION NUMBER: US/09/286,098
;  CURRENT FILING DATE: 1999-04-02
;  EARLIER APPLICATION NUMBER: US 60/080,729
;  EARLIER FILING DATE: 1998-04-03
;  NUMBER OF SEQ ID NOS: 105
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 24
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Sequence
US-09-286-098-24

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGTTCCTGATGCT 20


RESULT 10
US-08-960-774-7
; Sequence 7, Application US/08960774
```

; Patent No. 6239116
; GENERAL INFORMATION:
; APPLICANT: Krieg et al.,
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID MOLECULES
; NUMBER OF SEQUENCES: 111
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 4225 Executive Square, Suite 1400
; CITY: La Jolla
; STATE: CA
; COUNTRY: USA
; ZIP: 92037
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: ASCII text
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/960,774
; FILING DATE: 30-October-1997
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: U.S. Serial No. 6239116 08/738,652
; FILING DATE: October 30, 1996
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Haile, Lisa A.
; REGISTRATION NUMBER: 38,347
; REFERENCE/DOCKET NUMBER: 08918/012001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 619/678-5070
; TELEFAX: 619/678-5099
; INFORMATION FOR SEQ ID NO: 7:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
US-08-960-774-7

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGTTCCTGATGCT 20

RESULT 11
US-09-082-649B-68
; Sequence 68, Application US/09082649B
; Patent No. 6339068
; GENERAL INFORMATION:
; APPLICANT: Davis, Heather L.
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Schorr, Joachim
; APPLICANT: Wu, Tong
; TITLE OF INVENTION: Vectors and Methods for Immunization or
; TITLE OF INVENTION: Therapeutic Protocols
; FILE REFERENCE: C1039/7009
; CURRENT APPLICATION NUMBER: US/09/082,649B
; CURRENT FILING DATE: 1998-05-20
; PRIOR APPLICATION NUMBER: US 60/047,233
; PRIOR FILING DATE: 1997-05-20
; PRIOR APPLICATION NUMBER: US 60/047,209
; PRIOR FILING DATE: 1997-05-20
; NUMBER OF SEQ ID NOS: 85
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 68
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic oligonucleotide
; NAME/KEY: misc_feature
; LOCATION: (0)...(0)
; OTHER INFORMATION: Has a phosphodiester backbone.
US-09-082-649B-68

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGTTCCTGATGCT 20

RESULT 12
US-09-082-649B-79
; Sequence 79, Application US/09082649B
; Patent No. 6339068
; GENERAL INFORMATION:
; APPLICANT: Davis, Heather L.
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Schorr, Joachim
; APPLICANT: Wu, Tong
; TITLE OF INVENTION: Vectors and Methods for Immunization or
; TITLE OF INVENTION: Therapeutic Protocols
; FILE REFERENCE: C1039/7009
; CURRENT APPLICATION NUMBER: US/09/082,649B
; CURRENT FILING DATE: 1998-05-20
; PRIOR APPLICATION NUMBER: US 60/047,233
; PRIOR FILING DATE: 1997-05-20
; PRIOR APPLICATION NUMBER: US 60/047,209
; PRIOR FILING DATE: 1997-05-20
; NUMBER OF SEQ ID NOS: 85
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 79
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic oligonucleotide
US-09-082-649B-79

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGTTCCTGATGCT 20

RESULT 13
US-09-325-193A-19
; Sequence 19, Application US/09325193A
; Patent No. 6406705
; GENERAL INFORMATION:
; APPLICANT: Davis, Heather L.
; APPLICANT: Schorr, Joachim
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Use of Nucleic Acids Containing
; TITLE OF INVENTION: Unmethylated CpG Dinucleotide as an Adjuvant
; FILE REFERENCE: C1039/7025/HCL
; CURRENT APPLICATION NUMBER: US/09/325,193A
; CURRENT FILING DATE: 1999-06-03
; PRIOR APPLICATION NUMBER: US 09/154,614
; PRIOR FILING DATE: 1998-09-16
; PRIOR APPLICATION NUMBER: PCT/US98/04703
; PRIOR FILING DATE: 1998-03-10
; PRIOR APPLICATION NUMBER: US 60/040,376
; PRIOR FILING DATE: 1997-03-10

; NUMBER OF SEQ ID NOS: 98
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 19
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-09-325-193A-19

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGTTCCTGATGCT 20

RESULT 14
US-09-191-170-24
; Sequence 24, Application US/09191170
; Patent No. 6429199
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Hartmann, Gunther
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; TITLE OF INVENTION: for Activating Dendritic Cells
; FILE REFERENCE: C1039/7017
; CURRENT APPLICATION NUMBER: US/09/191,170
; CURRENT FILING DATE: 1998-11-13
; EARLIER APPLICATION NUMBER: US 08/960,774
; EARLIER FILING DATE: 1997-10-30
; EARLIER APPLICATION NUMBER: US 08/738,652
; EARLIER FILING DATE: 1996-10-30
; EARLIER APPLICATION NUMBER: US 08/386,063
; EARLIER FILING DATE: 1995-02-07
; EARLIER APPLICATION NUMBER: US 08/276,358
; EARLIER FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 99
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 24
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic oligonucleotide
US-09-191-170-24

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGTTCCTGATGCT 20

RESULT 15
US-09-171-425-5
; Sequence 5, Application US/09171425A
; Patent No. 6465438
; GENERAL INFORMATION:
; APPLICANT: Schorr, Joachim
; APPLICANT: Baker, Henry J.
; APPLICANT: Smith, Bruce F.
; TITLE OF INVENTION: NUCLEIC ACID VACCINATION FOR PARVOVIRAL INFECTIONS
; FILE REFERENCE: 08909/003001
; CURRENT APPLICATION NUMBER: US/09/171,425A
; CURRENT FILING DATE: 1998-10-19
; EARLIER APPLICATION NUMBER: PCT/EP97/01943
; EARLIER FILING DATE: 1996-04-19
; NUMBER OF SEQ ID NOS: 14
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetically generated oligonucleotides
US-09-171-425-5

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGTTCCTGATGCT 20

Search completed: April 17, 2006, 18:04:52
Job time : 57.375 secs

GenCore version 5.1.7

OM nucleic - nucleic search, using sw model

Run on: April 17, 2006, 17:32:13 ; Search time 366.375 Seconds
(without alignments)
451.416 Million cell updates/sec

Title: US-09-818-918-44
Perfect score: 20
Sequence: 1 tccatgacgttcctgatgct 20

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 9793542 seqs, 4134689005 residues

Total number of hits satisfying chosen parameters: 19587084

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_NA_Main:*
1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
2: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
3: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*
4: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:*
5: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
6: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
7: /cgn2_6/ptodata/1/pubpna/US10C_PUBCOMB.seq:*
8: /cgn2_6/ptodata/1/pubpna/US10D_PUBCOMB.seq:*
9: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq:*
10: /cgn2_6/ptodata/1/pubpna/US11_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	20	100.0	20	3	US-09-791-500-7	Sequence 7, Appli
2	20	100.0	20	3	US-09-824-468-24	Sequence 24, Appl
3	20	100.0	20	3	US-09-800-266A-19	Sequence 19, Appl
4	20	100.0	20	3	US-09-846-091-4	Sequence 4, Appli
5	20	100.0	20	3	US-09-895-007A-19	Sequence 19, Appl
6	20	100.0	20	3	US-09-920-313-19	Sequence 19, Appl
7	20	100.0	20	3	US-09-415-142-25	Sequence 25, Appl
8	20	100.0	20	3	US-09-888-326-127	Sequence 127, App
9	20	100.0	20	3	US-09-888-326-566	Sequence 566, App
10	20	100.0	20	3	US-09-888-326-567	Sequence 567, App
11	20	100.0	20	3	US-09-818-918-7	Sequence 7, Appli
12	20	100.0	20	3	US-09-818-918-35	Sequence 35, Appl
13	20	100.0	20	3	US-09-818-918-44	Sequence 44, Appl
14	20	100.0	20	3	US-09-818-918-54	Sequence 54, Appl
15	20	100.0	20	3	US-09-931-583-25	Sequence 25, Appl
16	20	100.0	20	3	US-09-931-583-48	Sequence 48, Appl
17	20	100.0	20	3	US-09-776-479-758	Sequence 758, App
18	20	100.0	20	3	US-09-776-479-806	Sequence 806, App
19	20	100.0	20	3	US-09-776-479-865	Sequence 865, App
20	20	100.0	20	3	US-09-954-987B-84	Sequence 84, Appl
21	20	100.0	20	3	US-09-954-987B-207	Sequence 207, App
22	20	100.0	20	3	US-09-967-464-7	Sequence 7, Appli
23	20	100.0	20	3	US-09-874-991C-27	Sequence 27, Appl
24	20	100.0	20	3	US-09-874-991C-93	Sequence 93, Appl
25	20	100.0	20	3	US-09-874-991C-114	Sequence 114, App
26	20	100.0	20	3	US-09-874-991C-138	Sequence 138, App
27	20	100.0	20	3	US-09-874-991C-165	Sequence 165, App
28	20	100.0	20	3	US-09-874-991C-186	Sequence 186, App
29	20	100.0	20	3	US-09-874-991C-406	Sequence 406, App
30	20	100.0	20	3	US-09-874-991C-425	Sequence 425, App
31	20	100.0	20	3	US-09-776-479-758	Sequence 758, App
32	20	100.0	20	3	US-09-776-479-806	Sequence 806, App
33	20	100.0	20	3	US-09-776-479-865	Sequence 865, App
34	20	100.0	20	3	US-09-965-101-68	Sequence 68, Appl
35	20	100.0	20	3	US-09-965-101-79	Sequence 79, Appl
36	20	100.0	20	5	US-10-023-909A-19	Sequence 19, Appl
37	20	100.0	20	5	US-10-205-150-7	Sequence 7, Appli
38	20	100.0	20	5	US-10-011-635A-1	Sequence 1, Appli
39	20	100.0	20	5	US-10-112-653-10	Sequence 10, Appl
40	20	100.0	20	5	US-10-112-653-11	Sequence 11, Appl
41	20	100.0	20	5	US-10-112-653-731	Sequence 731, App
42	20	100.0	20	5	US-10-112-653-779	Sequence 779, App
43	20	100.0	20	5	US-10-112-653-836	Sequence 836, App
44	20	100.0	20	5	US-10-017-995-758	Sequence 758, App
45	20	100.0	20	5	US-10-017-995-806	Sequence 806, App

ALIGNMENTS

RESULT 1
US-09-791-500-7
; Sequence 7, Application US/09791500
; Patent No. US20020042387A1
; GENERAL INFORMATION:
; APPLICANT: Raz, Eyal
; APPLICANT: Rachmilewitz, Daniel
; TITLE OF INVENTION: Method for Treating Inflammatory Bowel
; TITLE OF INVENTION: Disease and Other Forms of Gastrointestinal Inflammation.
; FILE REFERENCE: 6510-202US1
; CURRENT APPLICATION NUMBER: US/09/791,500
; CURRENT FILING DATE: 2001-02-22
; NUMBER OF SEQ ID NOS: 39
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 7
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic polynucleotide sequence
US-09-791-500-7

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.4;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGTTCCTGATGCT 20

RESULT 2
US-09-824-468-24
; Sequence 24, Application US/09824468
; Patent No. US20020064515A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Weiner, George
; TITLE OF INVENTION: Methods and Products for Stimulating the
; TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
; TITLE OF INVENTION: Cytokines
; FILE REFERENCE: C1039/7026/HCL
; CURRENT APPLICATION NUMBER: US/09/824,468
; CURRENT FILING DATE: 2001-04-02
; PRIOR APPLICATION NUMBER: 09/286,098
; PRIOR FILING DATE: 1999-04-02

```
;  NUMBER OF SEQ ID NOS: 105
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 24
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Sequence
US-09-824-468-24

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 6.4;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGTTCCTGATGCT 20


RESULT 3
US-09-800-266A-19
; Sequence 19, Application US/09800266A
; Patent No. US20020156033A1
; GENERAL INFORMATION:
;  APPLICANT: Bratzler, Robert L.
;  APPLICANT:  Petersen, Deanna M.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acids and
;  TITLE OF INVENTION:  Cancer Medicament Combination Therapy for the Treatment of
;  TITLE OF INVENTION:  Cancer
;  FILE REFERENCE: C1037/7017(HCL/MAT)
;  CURRENT APPLICATION NUMBER: US/09/800,266A
;  CURRENT FILING DATE:  2001-03-05
;  PRIOR APPLICATION NUMBER: US 60/187,214
;  PRIOR FILING DATE: 2000-03-03
;  NUMBER OF SEQ ID NOS: 146
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 19
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Sequence
US-09-800-266A-19

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 6.4;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGTTCCTGATGCT 20


RESULT 4
US-09-846-091-4
; Sequence 4, Application US/09846091
; Patent No. US20020165176A1
; GENERAL INFORMATION:
;  APPLICANT: HAYNES, Joel R.
;  APPLICANT:  MACKLIN, Michael D.
;  APPLICANT:  PAYNE, Lendon G.
;  TITLE OF INVENTION: NUCLEIC ACID IMMUNIZATION
;  FILE REFERENCE: APF40
;  CURRENT APPLICATION NUMBER: US/09/846,091
;  CURRENT FILING DATE:  2001-04-30
;  PRIOR APPLICATION NUMBER: US/09/561,951
;  PRIOR FILING DATE: 2000-05-01
;  NUMBER OF SEQ ID NOS: 11
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: Synthetic
;   OTHER INFORMATION: Construct
US-09-846-091-4

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 6.4;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGTTCCTGATGCT 20


RESULT 5
US-09-895-007A-19
; Sequence 19, Application US/09895007A
; Patent No. US20020165178A1
; GENERAL INFORMATION:
;  APPLICANT: Schetter, Christian
;  APPLICANT:  Bratzler, Robert L.
;  APPLICANT:  Petersen, Deanna M.
;  TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACIDS FOR THE
;  TITLE OF INVENTION:  TREATMENT OF ANEMIA, THROMBOCYTOPENIA, AND NEUTROPENIA
;  FILE REFERENCE: C1041/7014 (AWS)
;  CURRENT APPLICATION NUMBER: US/09/895,007A
;  CURRENT FILING DATE:  2001-06-28
;  PRIOR APPLICATION NUMBER: US 60/214,368
;  PRIOR FILING DATE: 2000-06-28
;  NUMBER OF SEQ ID NOS: 133
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 19
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-09-895-007A-19

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 6.4;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGTTCCTGATGCT 20


RESULT 6
US-09-920-313-19
; Sequence 19, Application US/09920313
; Publication No. US20020198165A1
; GENERAL INFORMATION:
;  APPLICANT: Bratzler, Robert L.
;  APPLICANT:  Petersen, Deanna M.
;  TITLE OF INVENTION: Nucleic Acids for the Prevention and
;  TITLE OF INVENTION:  Treatment of Gastric Ulcers
;  FILE REFERENCE: C1037/7019 (HCL/MAT)
;  CURRENT APPLICATION NUMBER: US/09/920,313
;  CURRENT FILING DATE:  2001-08-01
;  PRIOR APPLICATION NUMBER: US 60/222,248
;  PRIOR FILING DATE: 2001-08-08
;  NUMBER OF SEQ ID NOS: 148
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 19
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Sequence
US-09-920-313-19

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
```

Best Local Similarity 100.0%; Pred. No. 6.4;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 TCCATGACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGTTCCTGATGCT 20
```

RESULT 7
US-09-415-142-25
; Sequence 25, Application US/09415142
; Publication No. US20030026782A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: IMMUNOMODULATORY OLIGONUCLEOTIDES
; FILE REFERENCE: C1039/7029
; CURRENT APPLICATION NUMBER: US/09/415,142
; CURRENT FILING DATE: 1999-10-09
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 25
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-09-415-142-25

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.4;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 TCCATGACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGTTCCTGATGCT 20
```

RESULT 8
US-09-888-326-127
; Sequence 127, Application US/09888326
; Publication No. US20030026801A1
; GENERAL INFORMATION:
; APPLICANT: Weiner, George
; APPLICANT: Hartmann, Gunther
; TITLE OF INVENTION: Methods for Enhancing Antibody-Induced
; TITLE OF INVENTION: Cell Lysis and Treating Cancer
; FILE REFERENCE: C1039/7052 (AWS)
; CURRENT APPLICATION NUMBER: US/09/888,326
; CURRENT FILING DATE: 2001-06-22
; PRIOR APPLICATION NUMBER: US 60/213,346
; PRIOR FILING DATE: 2000-06-22
; NUMBER OF SEQ ID NOS: 848
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 127
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
; NAME/KEY: misc_feature
; LOCATION: (0)...(0)
; OTHER INFORMATION: phosphodiester backbone
; NAME/KEY: misc_feature
; LOCATION: (1)...(1)
; OTHER INFORMATION: biotinylated at 5' end
US-09-888-326-127

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.4;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 TCCATGACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGTTCCTGATGCT 20
```

RESULT 9
US-09-888-326-566
; Sequence 566, Application US/09888326
; Publication No. US20030026801A1
; GENERAL INFORMATION:
; APPLICANT: Weiner, George
; APPLICANT: Hartmann, Gunther
; TITLE OF INVENTION: Methods for Enhancing Antibody-Induced
; TITLE OF INVENTION: Cell Lysis and Treating Cancer
; FILE REFERENCE: C1039/7052 (AWS)
; CURRENT APPLICATION NUMBER: US/09/888,326
; CURRENT FILING DATE: 2001-06-22
; PRIOR APPLICATION NUMBER: US 60/213,346
; PRIOR FILING DATE: 2000-06-22
; NUMBER OF SEQ ID NOS: 848
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 566
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
; NAME/KEY: misc_feature
; LOCATION: (0)...(0)
; OTHER INFORMATION: phosphodiester backbone
US-09-888-326-566

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.4;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 TCCATGACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGTTCCTGATGCT 20
```

RESULT 10
US-09-888-326-567
; Sequence 567, Application US/09888326
; Publication No. US20030026801A1
; GENERAL INFORMATION:
; APPLICANT: Weiner, George
; APPLICANT: Hartmann, Gunther
; TITLE OF INVENTION: Methods for Enhancing Antibody-Induced
; TITLE OF INVENTION: Cell Lysis and Treating Cancer
; FILE REFERENCE: C1039/7052 (AWS)
; CURRENT APPLICATION NUMBER: US/09/888,326
; CURRENT FILING DATE: 2001-06-22
; PRIOR APPLICATION NUMBER: US 60/213,346
; PRIOR FILING DATE: 2000-06-22
; NUMBER OF SEQ ID NOS: 848
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 567
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
; NAME/KEY: misc_feature
; LOCATION: (0)...(0)
; OTHER INFORMATION: phosphorothioate backbone
US-09-888-326-567

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.4;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 TCCATGACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGTTCCTGATGCT 20


RESULT 11
US-09-818-918-7
; Sequence 7, Application US/09818918
; Publication No. US20030050261A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Kline, Joel N.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7048 (AWS)
;  CURRENT APPLICATION NUMBER: US/09/818,918
;  CURRENT FILING DATE:  2001-03-27
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  NUMBER OF SEQ ID NOS: 56
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 7
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-09-818-918-7

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 6.4;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGTTCCTGATGCT 20


RESULT 12
US-09-818-918-35
; Sequence 35, Application US/09818918
; Publication No. US20030050261A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Kline, Joel N.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7048 (AWS)
;  CURRENT APPLICATION NUMBER: US/09/818,918
;  CURRENT FILING DATE:  2001-03-27
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  NUMBER OF SEQ ID NOS: 56
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 35
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-09-818-918-35

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 6.4;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGTTCCTGATGCT 20


RESULT 13
US-09-818-918-44
; Sequence 44, Application US/09818918
; Publication No. US20030050261A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Kline, Joel N.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7048 (AWS)
;  CURRENT APPLICATION NUMBER: US/09/818,918
;  CURRENT FILING DATE:  2001-03-27
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  NUMBER OF SEQ ID NOS: 56
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 44
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-09-818-918-44

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 6.4;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATGACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGTTCCTGATGCT 20


RESULT 14
US-09-818-918-54
; Sequence 54, Application US/09818918
; Publication No. US20030050261A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Kline, Joel N.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7048 (AWS)
;  CURRENT APPLICATION NUMBER: US/09/818,918
;  CURRENT FILING DATE:  2001-03-27
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  NUMBER OF SEQ ID NOS: 56
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 54
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
```

; OTHER INFORMATION: Synthetic oligonucleotide
US-09-818-918-54

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.4;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGTTCCTGATGCT 20

RESULT 15
US-09-931-583-25
; Sequence 25, Application US/09931583
; Publication No. US20030050263A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred
; TITLE OF INVENTION: Methods and Products for Treating HIV Infection
; FILE REFERENCE: C1039/7053(HCL)
; CURRENT APPLICATION NUMBER: US/09/931,583
; CURRENT FILING DATE: 2001-08-16
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 09/415,142
; PRIOR FILING DATE: 1999-10-09
; NUMBER OF SEQ ID NOS: 75
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 25
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: Synthetic Oligonucleotide
US-09-931-583-25

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 6.4;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGTTCCTGATGCT 20

Search completed: April 17, 2006, 20:43:33
Job time : 366.5 secs

GenCore version 5.1.7

OM nucleic - nucleic search, using sw model

Run on: April 17, 2006, 17:33:01 ; Search time 425 Seconds
(without alignments)
189.545 Million cell updates/sec

Title: US-09-818-918-44
Perfect score: 20
Sequence: 1 tccatgacgttcctgatgct 20

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 9281099 seqs, 2013915447 residues

Total number of hits satisfying chosen parameters: 18562198

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_NA_New:*
1: /SIDS5/ptodata/1/pubpna/US08_NEW_PUB.seq:*
2: /SIDS5/ptodata/1/pubpna/US06_NEW_PUB.seq:*
3: /SIDS5/ptodata/1/pubpna/US07_NEW_PUB.seq:*
4: /SIDS5/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
5: /SIDS5/ptodata/1/pubpna/US09_NEW_PUB.seq:*
6: /SIDS5/ptodata/1/pubpna/US09_NEW_PUB.seq1:*
7: /SIDS5/ptodata/1/pubpna/US10_NEW_PUB.seq:*
8: /SIDS5/ptodata/1/pubpna/US10_NEW_PUB.seq1:*
9: /SIDS5/ptodata/1/pubpna/US10_NEW_PUB.seq2:*
10: /SIDS5/ptodata/1/pubpna/US10_NEW_PUB.seq3:*
11: /SIDS5/ptodata/1/pubpna/US11_NEW_PUB.seq:*
12: /SIDS5/ptodata/1/pubpna/US11_NEW_PUB.seq2:*
13: /SIDS5/ptodata/1/pubpna/US11_NEW_PUB.seq3:*
14: /SIDS5/ptodata/1/pubpna/US11_NEW_PUB.seq4:*
15: /SIDS5/ptodata/1/pubpna/US60_NEW_PUB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	20	100.0	20	8	US-10-497-591A-12	Sequence 12, Appl
2	20	100.0	20	8	US-10-469-561-9	Sequence 9, Appli
3	20	100.0	20	8	US-10-619-279-7	Sequence 7, Appli
4	20	100.0	20	8	US-10-435-656-7	Sequence 7, Appli
5	20	100.0	20	8	US-10-435-656-35	Sequence 35, Appl
6	20	100.0	20	8	US-10-435-656-44	Sequence 44, Appl
7	20	100.0	20	8	US-10-435-656-54	Sequence 54, Appl
8	20	100.0	20	10	US-10-382-822-7	Sequence 7, Appli
9	20	100.0	20	12	US-11-127-797-25	Sequence 25, Appl
10	20	100.0	20	12	US-11-127-803-25	Sequence 25, Appl
11	20	100.0	20	12	US-11-128-127-25	Sequence 25, Appl
12	20	100.0	20	14	US-11-025-858-2	Sequence 2, Appli
13	20	100.0	20	14	US-11-025-858-6	Sequence 6, Appli
14	20	100.0	20	14	US-11-127-654-10	Sequence 10, Appl
15	20	100.0	20	14	US-11-127-654-11	Sequence 11, Appl
16	20	100.0	20	14	US-11-127-654-731	Sequence 731, App
17	20	100.0	20	14	US-11-127-654-779	Sequence 779, App
18	20	100.0	20	14	US-11-127-654-836	Sequence 836, App
19	20	100.0	20	14	US-11-134-918-7	Sequence 7, Appli
20	20	100.0	20	14	US-11-134-918-35	Sequence 35, Appl
21	20	100.0	20	14	US-11-134-918-44	Sequence 44, Appl
22	20	100.0	20	14	US-11-134-918-54	Sequence 54, Appl
23	20	100.0	20	14	US-11-031-460-7	Sequence 7, Appli
24	20	100.0	20	14	US-11-031-460-35	Sequence 35, Appl
25	20	100.0	20	14	US-11-031-460-44	Sequence 44, Appl
26	20	100.0	20	14	US-11-031-460-54	Sequence 54, Appl
27	20	100.0	20	14	US-11-067-587-7	Sequence 7, Appli
28	20	100.0	20	14	US-11-067-587-35	Sequence 35, Appl
29	20	100.0	20	14	US-11-067-587-44	Sequence 44, Appl
30	20	100.0	20	14	US-11-067-587-54	Sequence 54, Appl
31	20	100.0	20	14	US-11-099-683-75	Sequence 75, Appl
32	20	100.0	20	14	US-11-099-683-76	Sequence 76, Appl
33	20	100.0	20	14	US-11-099-683-77	Sequence 77, Appl
34	20	100.0	20	14	US-11-099-683-78	Sequence 78, Appl
35	20	100.0	20	14	US-11-099-683-79	Sequence 79, Appl
36	20	100.0	20	14	US-11-099-683-80	Sequence 80, Appl
37	20	100.0	20	14	US-11-099-683-81	Sequence 81, Appl
38	20	100.0	29	14	US-11-127-654-200	Sequence 200, App
39	19	95.0	19	9	US-10-925-872-45	Sequence 45, Appl
40	19	95.0	19	14	US-11-173-938-89	Sequence 89, Appl
41	19	95.0	19	14	US-11-173-938-90	Sequence 90, Appl
42	19	95.0	19	14	US-11-173-938-91	Sequence 91, Appl
43	19	95.0	19	14	US-11-173-938-92	Sequence 92, Appl
44	19	95.0	19	14	US-11-173-938-93	Sequence 93, Appl
45	19	95.0	19	14	US-11-173-938-94	Sequence 94, Appl

ALIGNMENTS

RESULT 1
US-10-497-591A-12
; Sequence 12, Application US/10497591A
; Publication No. US20050250716A1
; GENERAL INFORMATION:
; APPLICANT: SCHMIDT, WALTER
; APPLICANT: SCHELLACK, CAROLA
; APPLICANT: EGYED, ALENA
; APPLICANT: LINGNAU, KAREN
; TITLE OF INVENTION: IMMUNOSTIMULATORY OLIGODEOXYNUCLEOTIDES
; FILE REFERENCE: SONN:045US
; CURRENT APPLICATION NUMBER: US/10/497,591A
; CURRENT FILING DATE: 2004-06-03
; PRIOR APPLICATION NUMBER: PCT/EP02/13791
; PRIOR FILING DATE: 2002-12-05
; PRIOR APPLICATION NUMBER: A 1924/2001
; PRIOR FILING DATE: 2001-12-07
; NUMBER OF SEQ ID NOS: 113
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 12
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; OTHER INFORMATION: Primer
US-10-497-591A-12

Query Match 100.0%; Score 20; DB 8; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.71;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGTTCCTGATGCT 20

RESULT 2
US-10-469-561-9
; Sequence 9, Application US/10469561
; Publication No. US20050260216A1

; GENERAL INFORMATION:
; APPLICANT: Claire Ashman
; APPLICANT: James Scott Crowe
; APPLICANT: Jonathan Henry Ellis
; APPLICANT: Alan Peter Lewis
; TITLE OF INVENTION: VACCINE
; FILE REFERENCE: PG4355USw
; CURRENT APPLICATION NUMBER: US/10/469,561
; CURRENT FILING DATE: 2003-08-29
; NUMBER OF SEQ ID NOS: 25
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 9
; LENGTH: 20
; TYPE: DNA
; ORGANISM: unknown
; FEATURE:
; OTHER INFORMATION: synthetic immunostimulatory oligonucleotide
US-10-469-561-9

Query Match 100.0%; Score 20; DB 8; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.71;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGTTCCTGATGCT 20

RESULT 3
US-10-619-279-7
; Sequence 7, Application US/10619279
; Publication No. US20050267057A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7023/HCL
; CURRENT APPLICATION NUMBER: US/10/619,279
; CURRENT FILING DATE: 2003-07-14
; PRIOR APPLICATION NUMBER: US 08/960,774
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 123
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 7
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-619-279-7

Query Match 100.0%; Score 20; DB 8; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.71;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGTTCCTGATGCT 20

RESULT 4
US-10-435-656-7
; Sequence 7, Application US/10435656
; Publication No. US20050277604A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AWS)
; CURRENT APPLICATION NUMBER: US/10/435,656
; CURRENT FILING DATE: 2003-05-09
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 7
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-10-435-656-7

Query Match 100.0%; Score 20; DB 8; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.71;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGTTCCTGATGCT 20

RESULT 5
US-10-435-656-35
; Sequence 35, Application US/10435656
; Publication No. US20050277604A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AWS)
; CURRENT APPLICATION NUMBER: US/10/435,656
; CURRENT FILING DATE: 2003-05-09
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 35
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-10-435-656-35

Query Match 100.0%; Score 20; DB 8; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.71;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGTTCCTGATGCT 20

RESULT 6
US-10-435-656-44
; Sequence 44, Application US/10435656
; Publication No. US20050277604A1
; GENERAL INFORMATION:

; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AWS)
; CURRENT APPLICATION NUMBER: US/10/435,656
; CURRENT FILING DATE: 2003-05-09
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 44
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-10-435-656-44

Query Match 100.0%; Score 20; DB 8; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.71;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGTTCCTGATGCT 20

RESULT 7
US-10-435-656-54
; Sequence 54, Application US/10435656
; Publication No. US20050277604A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AWS)
; CURRENT APPLICATION NUMBER: US/10/435,656
; CURRENT FILING DATE: 2003-05-09
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 54
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-10-435-656-54

Query Match 100.0%; Score 20; DB 8; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.71;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGTTCCTGATGCT 20

RESULT 8
US-10-382-822-7
; Sequence 7, Application US/10382822
; Publication No. US20060058251A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Methods for Treating and Preventing
; TITLE OF INVENTION: Infectious Disease
; FILE REFERENCE: C01039.70062.US
; CURRENT APPLICATION NUMBER: US/10/382,822
; CURRENT FILING DATE: 2003-03-06
; PRIOR APPLICATION NUMBER: US 09/630,319
; PRIOR FILING DATE: 2000-07-31
; PRIOR APPLICATION NUMBER: US 08/960,774
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 124
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 7
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-382-822-7

Query Match 100.0%; Score 20; DB 10; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.71;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGTTCCTGATGCT 20

RESULT 9
US-11-127-797-25
; Sequence 25, Application US/11127797
; Publication No. US20050245477A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: IMMUNOMODULATORY OLIGONUCLEOTIDES
; FILE REFERENCE: C1039/7029
; CURRENT APPLICATION NUMBER: US/11/127,797
; CURRENT FILING DATE: 2005-05-11
; PRIOR APPLICATION NUMBER: US/10/690,495
; PRIOR FILING DATE: 2003-10-21
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 25
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-127-797-25

Query Match 100.0%; Score 20; DB 12; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.71;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGTTCCTGATGCT 20

RESULT 10
US-11-127-803-25
; Sequence 25, Application US/11127803
; Publication No. US20050244379A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: IMMUNOMODULATORY OLIGONUCLEOTIDES
; FILE REFERENCE: C1039/7029
; CURRENT APPLICATION NUMBER: US/11/127,803
; CURRENT FILING DATE: 2005-05-11
; PRIOR APPLICATION NUMBER: US/10/690,495
; PRIOR FILING DATE: 2003-10-21
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 25
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-127-803-25

Query Match 100.0%; Score 20; DB 12; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.71;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGTTCCTGATGCT 20

RESULT 11
US-11-128-127-25
; Sequence 25, Application US/11128127
; Publication No. US20050244380A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: IMMUNOMODULATORY OLIGONUCLEOTIDES
; FILE REFERENCE: C1039/7029
; CURRENT APPLICATION NUMBER: US/11/128,127
; CURRENT FILING DATE: 2005-05-11
; PRIOR APPLICATION NUMBER: US/10/690,495
; PRIOR FILING DATE: 2003-10-21
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 25
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-128-127-25

Query Match 100.0%; Score 20; DB 12; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.71;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGTTCCTGATGCT 20

RESULT 12
US-11-025-858-2
; Sequence 2, Application US/11025858
; Publication No. US20050250723A1
; GENERAL INFORMATION:
; APPLICANT: Hoerr, Ingmar
; APPLICANT: Von Der Mulbe, Florian
; APPLICANT: Pascolo, Steve
; TITLE OF INVENTION: Immunstimulation by chemically modified RNA
; FILE REFERENCE: Curevac GmbH (2793-1-002)
; CURRENT APPLICATION NUMBER: US/11/025,858
; CURRENT FILING DATE: 2004-12-28
; PRIOR APPLICATION NUMBER: PCT/EP2003/007175
; PRIOR FILING DATE: 2003-07-03
; PRIOR APPLICATION NUMBER: DE 10229872.6
; PRIOR FILING DATE: 2002-07-03
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 2
; LENGTH: 20
; TYPE: RNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic oligonucleotide, CpG RNA 1668
US-11-025-858-2

Query Match 100.0%; Score 20; DB 14; Length 20;
Best Local Similarity 65.0%; Pred. No. 0.71;
Matches 13; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCCTGATGCT 20
:|||:||||::||:||:||:
Db 1 UCCAUGACGUUCCUGAUGCU 20

RESULT 13
US-11-025-858-6
; Sequence 6, Application US/11025858
; Publication No. US20050250723A1
; GENERAL INFORMATION:
; APPLICANT: Hoerr, Ingmar
; APPLICANT: Von Der Mulbe, Florian
; APPLICANT: Pascolo, Steve
; TITLE OF INVENTION: Immunstimulation by chemically modified RNA
; FILE REFERENCE: Curevac GmbH (2793-1-002)
; CURRENT APPLICATION NUMBER: US/11/025,858
; CURRENT FILING DATE: 2004-12-28
; PRIOR APPLICATION NUMBER: PCT/EP2003/007175
; PRIOR FILING DATE: 2003-07-03
; PRIOR APPLICATION NUMBER: DE 10229872.6
; PRIOR FILING DATE: 2002-07-03
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 6
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic oligonucleotide, CpG DNA 1668
US-11-025-858-6

Query Match 100.0%; Score 20; DB 14; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.71;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATGACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATGACGTTCCTGATGCT 20

RESULT 14
US-11-127-654-10
; Sequence 10, Application US/11127654
; Publication No. US20050250726A1

; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Berg, Daniel J.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
; TITLE OF INVENTION: INFLAMMATORY DISEASES
; FILE REFERENCE: C1039.70060US01
; CURRENT APPLICATION NUMBER: US/11/127,654
; CURRENT FILING DATE: 2005-05-12
; PRIOR APPLICATION NUMBER: US 10/112,653
; PRIOR FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/279,642
; PRIOR FILING DATE: 2001-03-29
; NUMBER OF SEQ ID NOS: 1040
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 10
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (8)..(8)
; OTHER INFORMATION: m5c
US-11-127-654-10

Query Match 100.0%; Score 20; DB 14; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.71;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 TCCATGACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGTTCCTGATGCT 20
```

RESULT 15
US-11-127-654-11
; Sequence 11, Application US/11127654
; Publication No. US20050250726A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Berg, Daniel J.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
; TITLE OF INVENTION: INFLAMMATORY DISEASES
; FILE REFERENCE: C1039.70060US01
; CURRENT APPLICATION NUMBER: US/11/127,654
; CURRENT FILING DATE: 2005-05-12
; PRIOR APPLICATION NUMBER: US 10/112,653
; PRIOR FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/279,642
; PRIOR FILING DATE: 2001-03-29
; NUMBER OF SEQ ID NOS: 1040
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 11
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (13)..(13)
; OTHER INFORMATION: m5c
US-11-127-654-11

Query Match 100.0%; Score 20; DB 14; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.71;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 TCCATGACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATGACGTTCCTGATGCT 20
```

Search completed: April 17, 2006, 18:51:09
Job time : 425.125 secs

GenCore version 5.1.7

OM nucleic - nucleic search, using sw model

Run on: April 17, 2006, 14:43:57 ; Search time 56.375 Seconds
(without alignments)
630.621 Million cell updates/sec

Title: US-09-818-918-45
Perfect score: 20
Sequence: 1 tccataacgttcctgatgct 20

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 1303057 seqs, 888780828 residues

Total number of hits satisfying chosen parameters: 2606114

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_NA:*
1: /cgn2_6/ptodata/1/ina/1_COMB.seq:*
2: /cgn2_6/ptodata/1/ina/5_COMB.seq:*
3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/1/ina/H_COMB.seq:*
6: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
7: /cgn2_6/ptodata/1/ina/PP_COMB.seq:*
8: /cgn2_6/ptodata/1/ina/RE_COMB.seq:*
9: /cgn2_6/ptodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	20	100.0	20	3	US-08-738-652-3	Sequence 3, Appli
2	20	100.0	20	3	US-08-738-652-45	Sequence 45, Appl
3	20	100.0	20	3	US-09-286-098-49	Sequence 49, Appl
4	20	100.0	20	3	US-08-960-774-3	Sequence 3, Appli
5	20	100.0	20	3	US-09-325-193A-43	Sequence 43, Appl
6	20	100.0	20	3	US-09-191-170-44	Sequence 44, Appl
7	20	100.0	20	3	US-09-296-477-18	Sequence 18, Appl
8	20	100.0	20	3	US-09-337-619-3	Sequence 3, Appli
9	20	100.0	20	3	US-09-954-987B-77	Sequence 77, Appl
10	20	100.0	20	3	US-09-672-126B-77	Sequence 77, Appl
11	18.4	92.0	20	2	US-09-133-774-11	Sequence 11, Appl
12	18.4	92.0	20	3	US-08-386-063-25	Sequence 25, Appl
13	18.4	92.0	20	3	US-09-303-862-11	Sequence 11, Appl
14	18.4	92.0	20	3	US-08-386-063-25	Sequence 25, Appl
15	18.4	92.0	20	3	US-08-738-652-7	Sequence 7, Appli
16	18.4	92.0	20	3	US-08-738-652-35	Sequence 35, Appl
17	18.4	92.0	20	3	US-08-738-652-44	Sequence 44, Appl
18	18.4	92.0	20	3	US-08-738-652-54	Sequence 54, Appl
19	18.4	92.0	20	3	US-09-286-098-24	Sequence 24, Appl
20	18.4	92.0	20	3	US-08-960-774-7	Sequence 7, Appli
21	18.4	92.0	20	3	US-08-960-774-88	Sequence 88, Appl
22	18.4	92.0	20	3	US-09-082-649B-68	Sequence 68, Appl
23	18.4	92.0	20	3	US-09-082-649B-79	Sequence 79, Appl
24	18.4	92.0	20	3	US-09-325-193A-19	Sequence 19, Appl
25	18.4	92.0	20	3	US-09-191-170-24	Sequence 24, Appl
26	18.4	92.0	20	3	US-09-171-425-5	Sequence 5, Appli
27	18.4	92.0	20	3	US-09-171-425-14	Sequence 14, Appl
28	18.4	92.0	20	3	US-09-690-921-5	Sequence 5, Appli
29	18.4	92.0	20	3	US-09-791-500-7	Sequence 7, Appli
30	18.4	92.0	20	3	US-09-337-619-7	Sequence 7, Appli
31	18.4	92.0	20	3	US-09-965-101-68	Sequence 68, Appl
32	18.4	92.0	20	3	US-09-965-101-79	Sequence 79, Appl
33	18.4	92.0	20	3	US-10-764-718-2	Sequence 2, Appli
34	18.4	92.0	20	3	US-09-954-987B-84	Sequence 84, Appl
35	18.4	92.0	20	3	US-09-954-987B-207	Sequence 207, App
36	18.4	92.0	20	3	US-09-672-126B-84	Sequence 84, Appl
37	18.4	92.0	29	3	US-08-848-229-2	Sequence 2, Appli
38	18.4	92.0	29	3	US-09-022-965-2	Sequence 2, Appli
39	17.4	87.0	19	3	US-09-770-602-1	Sequence 1, Appli
40	17.4	87.0	19	3	US-09-770-602-2	Sequence 2, Appli
41	17.4	87.0	19	3	US-09-770-602-3	Sequence 3, Appli
42	17.4	87.0	19	3	US-09-770-602-4	Sequence 4, Appli
43	17.4	87.0	19	3	US-09-770-602-5	Sequence 5, Appli
44	17.4	87.0	19	3	US-09-770-602-6	Sequence 6, Appli
45	17.4	87.0	19	3	US-09-770-602-7	Sequence 7, Appli

ALIGNMENTS

RESULT 1
US-08-738-652-3
; Sequence 3, Application US/08738652B
; Patent No. 6207646
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7004 HCL
; CURRENT APPLICATION NUMBER: US/08/738,652B
; CURRENT FILING DATE: 1996-10-30
; EARLIER APPLICATION NUMBER: US 08/276,358
; EARLIER FILING DATE: 1994-07-15
; EARLIER APPLICATION NUMBER: US 08/386,063
; EARLIER FILING DATE: 1995-02-07
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-08-738-652-3

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.41;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATAACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATAACGTTCCTGATGCT 20

RESULT 2
US-08-738-652-45
; Sequence 45, Application US/08738652B
; Patent No. 6207646
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7004 HCL
; CURRENT APPLICATION NUMBER: US/08/738,652B
; CURRENT FILING DATE: 1996-10-30
; EARLIER APPLICATION NUMBER: US 08/276,358
; EARLIER FILING DATE: 1994-07-15
; EARLIER APPLICATION NUMBER: US 08/386,063
; EARLIER FILING DATE: 1995-02-07

; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 45
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-08-738-652-45

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.41;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATAACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATAACGTTCCTGATGCT 20

RESULT 3
US-09-286-098-49
; Sequence 49, Application US/09286098
; Patent No. 6218371
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Weiner, George
; TITLE OF INVENTION: Methods and Products for Stimulating the
; TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
; TITLE OF INVENTION: Cytokines
; FILE REFERENCE: C1039/7026/HCL
; CURRENT APPLICATION NUMBER: US/09/286,098
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,729
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 105
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 49
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-286-098-49

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.41;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATAACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATAACGTTCCTGATGCT 20

RESULT 4
US-08-960-774-3
; Sequence 3, Application US/08960774
; Patent No. 6239116
; GENERAL INFORMATION:
; APPLICANT: Krieg et al.,
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID MOLECULES
; NUMBER OF SEQUENCES: 111
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 4225 Executive Square, Suite 1400
; CITY: La Jolla
; STATE: CA
; COUNTRY: USA
; ZIP: 92037
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: ASCII text
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/960,774
; FILING DATE: 30-October-1997
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: U.S. Serial No. 6239116 08/738,652
; FILING DATE: October 30, 1996
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Haile, Lisa A.
; REGISTRATION NUMBER: 38,347
; REFERENCE/DOCKET NUMBER: 08918/012001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 619/678-5070
; TELEFAX: 619/678-5099
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
US-08-960-774-3

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.41;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATAACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATAACGTTCCTGATGCT 20

RESULT 5
US-09-325-193A-43
; Sequence 43, Application US/09325193A
; Patent No. 6406705
; GENERAL INFORMATION:
; APPLICANT: Davis, Heather L.
; APPLICANT: Schorr, Joachim
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Use of Nucleic Acids Containing
; TITLE OF INVENTION: Unmethylated CpG Dinucleotide as an Adjuvant
; FILE REFERENCE: C1039/7025/HCL
; CURRENT APPLICATION NUMBER: US/09/325,193A
; CURRENT FILING DATE: 1999-06-03
; PRIOR APPLICATION NUMBER: US 09/154,614
; PRIOR FILING DATE: 1998-09-16
; PRIOR APPLICATION NUMBER: PCT/US98/04703
; PRIOR FILING DATE: 1998-03-10
; PRIOR APPLICATION NUMBER: US 60/040,376
; PRIOR FILING DATE: 1997-03-10
; NUMBER OF SEQ ID NOS: 98
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 43
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-09-325-193A-43

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.41;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATAACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATAACGTTCCTGATGCT 20

RESULT 6
US-09-191-170-44

; Sequence 44, Application US/09191170
; Patent No. 6429199
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Hartmann, Gunther
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; TITLE OF INVENTION: for Activating Dendritic Cells
; FILE REFERENCE: C1039/7017
; CURRENT APPLICATION NUMBER: US/09/191,170
; CURRENT FILING DATE: 1998-11-13
; EARLIER APPLICATION NUMBER: US 08/960,774
; EARLIER FILING DATE: 1997-10-30
; EARLIER APPLICATION NUMBER: US 08/738,652
; EARLIER FILING DATE: 1996-10-30
; EARLIER APPLICATION NUMBER: US 08/386,063
; EARLIER FILING DATE: 1995-02-07
; EARLIER APPLICATION NUMBER: US 08/276,358
; EARLIER FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 99
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 44
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic oligonucleotide
US-09-191-170-44

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.41;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATAACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATAACGTTCCTGATGCT 20

RESULT 7
US-09-296-477-18
; Sequence 18, Application US/09296477A
; Patent No. 6589940
; GENERAL INFORMATION:
; APPLICANT: RAZ, E.
; APPLICANT: SCHWARTZ, D.
; APPLICANT: ROMAN, M.
; APPLICANT: DINA, D.
; TITLE OF INVENTION: IMMUNOSTIMULATORY OLIGONUCLEOTIDES,
; TITLE OF INVENTION: COMPOSITIONS THEREOF AND METHODS OF USE
; TITLE OF INVENTION: THEREOF
; FILE REFERENCE: 377882000420
; CURRENT APPLICATION NUMBER: US/09/296,477A
; CURRENT FILING DATE: 1999-04-22
; EARLIER APPLICATION NUMBER: 09/092,329
; EARLIER FILING DATE: 1998-06-05
; EARLIER APPLICATION NUMBER: 60/048,793
; EARLIER FILING DATE: 1997-06-06
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 18
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-09-296-477-18

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.41;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATAACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATAACGTTCCTGATGCT 20

RESULT 8
US-09-337-619-3
; Sequence 3, Application US/09337619
; Patent No. 6653292
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Methods of Treating Cancer Using
; TITLE OF INVENTION: Immunostimulatory Oligonucleotides
; FILE REFERENCE: C1039/7021/HCL
; CURRENT APPLICATION NUMBER: US/09/337,619
; CURRENT FILING DATE: 1999-06-21
; EARLIER APPLICATION NUMBER: US 08/960,774
; EARLIER FILING DATE: 1997-10-30
; EARLIER APPLICATION NUMBER: US 08/738,652
; EARLIER FILING DATE: 1996-10-30
; EARLIER APPLICATION NUMBER: US 08/386,063
; EARLIER FILING DATE: 1995-02-07
; EARLIER APPLICATION NUMBER: US 08/276,358
; EARLIER FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 123
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-09-337-619-3

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.41;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATAACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATAACGTTCCTGATGCT 20

RESULT 9
US-09-954-987B-77
; Sequence 77, Application US/09954987B
; Patent No. 6943240
; GENERAL INFORMATION:
; APPLICANT: Stefan Bauer
; APPLICANT: Grayson B. Lipford
; APPLICANT: Hermann Wagner
; TITLE OF INVENTION: PROCESS FOR HIGH THROUGHPUT SCREENING OF
; TITLE OF INVENTION: CpG-BASED IMMUNO-AGONIST/ANTAGONIST
; FILE REFERENCE: C1041/7016 (AWS)
; CURRENT APPLICATION NUMBER: US/09/954,987B
; CURRENT FILING DATE: 2001-09-17
; PRIOR APPLICATION NUMBER: US 60/233,035
; PRIOR FILING DATE: 2000-09-15
; PRIOR APPLICATION NUMBER: US 60/263,657
; PRIOR FILING DATE: 2001-01-23
; PRIOR APPLICATION NUMBER: US 60/291,726
; PRIOR FILING DATE: 2001-05-17
; PRIOR APPLICATION NUMBER: US 60/300,210
; PRIOR FILING DATE: 2001-06-22
; NUMBER OF SEQ ID NOS: 230
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 77
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-09-954-987B-77

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.41;

```
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATAACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATAACGTTCCTGATGCT 20


RESULT 10
US-09-672-126B-77
; Sequence 77, Application US/09672126B
; Patent No. 6949520
; GENERAL INFORMATION:
;  APPLICANT: Hartmann, Gunther
;  APPLICANT:  Bratzler, Robert L.
;  APPLICANT:  Krieg, Arthur
;  TITLE OF INVENTION: Methods Related to Immunostimulatory
;  TITLE OF INVENTION:  Nucleic Acid-Induced Interferon
;  FILE REFERENCE: C1039/7044
;  CURRENT APPLICATION NUMBER: US/09/672,126B
;  CURRENT FILING DATE:  2000-09-27
;  PRIOR APPLICATION NUMBER: 60/156,147
;  PRIOR FILING DATE: 1999-09-29
;  NUMBER OF SEQ ID NOS: 169
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 77
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Oligonucleotide
US-09-672-126B-77

  Query Match            100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity  100.0%;  Pred. No. 0.41;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATAACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATAACGTTCCTGATGCT 20


RESULT 11
US-09-133-774-11
; Sequence 11, Application US/09133774B
; Patent No. 5962636
; GENERAL INFORMATION:
;  APPLICANT: Bachmaier, Kurt
;  APPLICANT: Hessel, Andrew J.
;  APPLICANT: Neu M.D., Nikolaus
;  APPLICANT: Penninger, Josef M.
;  TITLE OF INVENTION: No. 5962636el Peptides Capable of Modulating Inflammatory Heart
;  TITLE OF INVENTION: Disease
;  FILE REFERENCE: A-536
;  CURRENT APPLICATION NUMBER: US/09/133,774B
;  CURRENT FILING DATE: 1998-08-12
;  NUMBER OF SEQ ID NOS: 26
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 11
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Chlamydia trachomatis
;   FEATURE:
;   OTHER INFORMATION: An oligonucleotide derived from the DNA encoding a
;   OTHER INFORMATION: 60 kDa cysteine rich outer membrane protein from
;   OTHER INFORMATION: Chlamydia trachomatis.
US-09-133-774-11

  Query Match             92.0%;  Score 18.4;  DB 2;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 2.8;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATAACGTTCCTGATGCT 20
              ||||| ||||||||||||||
```

```
Db          1 TCCATGACGTTCCTGATGCT 20


RESULT 12
US-08-386-063-25
; Sequence 25, Application US/08386063
; Patent No. 6008200
;  GENERAL INFORMATION:
;    APPLICANT:  Arthur M. Krieg, M.D.
;    TITLE OF INVENTION:  IMMUNOMODULATORY OLIGONUCLEOTIDES
;    NUMBER OF SEQUENCES:  27
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  LAHIVE & COCKFIELD
;      STREET:  60 STATE STREET, SUITE 510
;      CITY:  BOSTON
;      STATE:  MASSACHUSETTS
;      COUNTRY:  USA
;      ZIP:  02109-1875
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  ASCII text
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/386,063
;      FILING DATE:
;      CLASSIFICATION:  424
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  ARNOLD, BETH E.
;      REGISTRATION NUMBER:  35,430
;      REFERENCE/DOCKET NUMBER:  UIZ-013CP
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (617)227-7400
;      TELEFAX:  (617)227-5941
;  INFORMATION FOR SEQ ID NO:  25:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-386-063-25

  Query Match             92.0%;  Score 18.4;  DB 3;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 2.8;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 TCCATAACGTTCCTGATGCT 20
              ||||| ||||||||||||||
Db          1 TCCATGACGTTCCTGATGCT 20


RESULT 13
US-09-303-862-11
; Sequence 11, Application US/09303862
; Patent No. 6034230
; GENERAL INFORMATION:
;  APPLICANT: Bachmaier, Kurt
;  APPLICANT: Hessel, Andrew J.
;  APPLICANT: Neu M.D., Nikolaus
;  APPLICANT: Penninger, Josef M.
;  TITLE OF INVENTION: No. 6034230el Peptides Capable of Modulating Inflammatory Heart
;  TITLE OF INVENTION: Disease
;  FILE REFERENCE: A-536
;  CURRENT APPLICATION NUMBER: US/09/303,862
;  CURRENT FILING DATE: 1999-05-03
;  EARLIER APPLICATION NUMBER: 09/133,774
;  EARLIER FILING DATE: 1998-08-12
;  NUMBER OF SEQ ID NOS: 26
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 11
;   LENGTH: 20
;   TYPE: DNA
```

; ORGANISM: Chlamydia trachomatis
; FEATURE:
; OTHER INFORMATION: An oligonucleotide derived from the DNA encoding a
; OTHER INFORMATION: 60 kDa cysteine rich outer membrane protein from
; OTHER INFORMATION: Chlamydia trachomatis.
US-09-303-862-11

Query Match 92.0%; Score 18.4; DB 3; Length 20;
Best Local Similarity 95.0%; Pred. No. 2.8;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 TCCATAACGTTCCTGATGCT 20
||||| ||||||||||||||
Db 1 TCCATGACGTTCCTGATGCT 20

RESULT 14
US-08-386-063-25
; Sequence 25, Application US/08386063
; Patent No. 6194388
; GENERAL INFORMATION:
; APPLICANT: Arthur M. Krieg, M.D.
; TITLE OF INVENTION: IMMUNOMODULATORY OLIGONUCLEOTIDES
; NUMBER OF SEQUENCES: 27
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: LAHIVE & COCKFIELD
; STREET: 60 STATE STREET, SUITE 510
; CITY: BOSTON
; STATE: MASSACHUSETTS
; COUNTRY: USA
; ZIP: 02109-1875
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: ASCII text
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/386,063
; FILING DATE:
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: ARNOLD, BETH E.
; REGISTRATION NUMBER: 35,430
; REFERENCE/DOCKET NUMBER: UIZ-013CP
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (617)227-7400
; TELEFAX: (617)227-5941
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-386-063-25

Query Match 92.0%; Score 18.4; DB 3; Length 20;
Best Local Similarity 95.0%; Pred. No. 2.8;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 TCCATAACGTTCCTGATGCT 20
||||| ||||||||||||||
Db 1 TCCATGACGTTCCTGATGCT 20

RESULT 15
US-08-738-652-7
; Sequence 7, Application US/08738652B
; Patent No. 6207646
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7004 HCL
; CURRENT APPLICATION NUMBER: US/08/738,652B
; CURRENT FILING DATE: 1996-10-30
; EARLIER APPLICATION NUMBER: US 08/276,358
; EARLIER FILING DATE: 1994-07-15
; EARLIER APPLICATION NUMBER: US 08/386,063
; EARLIER FILING DATE: 1995-02-07
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 7
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-08-738-652-7

Query Match 92.0%; Score 18.4; DB 3; Length 20;
Best Local Similarity 95.0%; Pred. No. 2.8;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 TCCATAACGTTCCTGATGCT 20
||||| ||||||||||||||
Db 1 TCCATGACGTTCCTGATGCT 20

Search completed: April 17, 2006, 18:04:52
Job time : 56.375 secs

GenCore version 5.1.7

OM nucleic - nucleic search, using sw model

Run on: April 17, 2006, 17:32:13 ; Search time 366.375 Seconds
(without alignments)
451.416 Million cell updates/sec

Title: US-09-818-918-45
Perfect score: 20
Sequence: 1 tccataacgttcctgatgct 20

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 9793542 seqs, 4134689005 residues

Total number of hits satisfying chosen parameters: 19587084

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_NA_Main:*
1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
2: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
3: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*
4: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:*
5: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
6: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
7: /cgn2_6/ptodata/1/pubpna/US10C_PUBCOMB.seq:*
8: /cgn2_6/ptodata/1/pubpna/US10D_PUBCOMB.seq:*
9: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq:*
10: /cgn2_6/ptodata/1/pubpna/US11_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	20	100.0	20	3	US-09-824-468-49	Sequence 49, Appl
2	20	100.0	20	3	US-09-800-266A-43	Sequence 43, Appl
3	20	100.0	20	3	US-09-895-007A-43	Sequence 43, Appl
4	20	100.0	20	3	US-09-920-313-43	Sequence 43, Appl
5	20	100.0	20	3	US-09-888-326-545	Sequence 545, App
6	20	100.0	20	3	US-09-818-918-3	Sequence 3, Appli
7	20	100.0	20	3	US-09-818-918-45	Sequence 45, Appl
8	20	100.0	20	3	US-09-931-583-42	Sequence 42, Appl
9	20	100.0	20	3	US-09-776-479-777	Sequence 777, App
10	20	100.0	20	3	US-09-954-987B-77	Sequence 77, Appl
11	20	100.0	20	3	US-09-874-991C-44	Sequence 44, Appl
12	20	100.0	20	3	US-09-874-991C-110	Sequence 110, App
13	20	100.0	20	3	US-09-874-991C-133	Sequence 133, App
14	20	100.0	20	3	US-09-874-991C-161	Sequence 161, App
15	20	100.0	20	3	US-09-874-991C-182	Sequence 182, App
16	20	100.0	20	3	US-09-874-991C-207	Sequence 207, App
17	20	100.0	20	3	US-09-776-479-777	Sequence 777, App
18	20	100.0	20	5	US-10-023-909A-43	Sequence 43, Appl
19	20	100.0	20	5	US-10-112-653-750	Sequence 750, App
20	20	100.0	20	5	US-10-017-995-777	Sequence 777, App
21	20	100.0	20	5	US-10-300-247-43	Sequence 43, Appl
22	20	100.0	20	5	US-10-161-229-44	Sequence 44, Appl
23	20	100.0	20	6	US-10-187-264A-3	Sequence 3, Appli
24	20	100.0	20	6	US-10-265-072-78	Sequence 78, Appl
25	20	100.0	20	6	US-10-306-522-3	Sequence 3, Appli
26	20	100.0	20	6	US-10-314-578-777	Sequence 777, App
27	20	100.0	20	6	US-10-434-696-43	Sequence 43, Appl
28	20	100.0	20	7	US-10-373-381-36	Sequence 36, Appl
29	20	100.0	20	7	US-10-719-493-3	Sequence 3, Appli
30	20	100.0	20	7	US-10-627-331-3	Sequence 3, Appli
31	20	100.0	20	7	US-10-666-733-43	Sequence 43, Appl
32	20	100.0	20	7	US-10-743-625-3	Sequence 3, Appli
33	20	100.0	20	7	US-10-743-625-45	Sequence 45, Appl
34	20	100.0	20	7	US-10-679-710-3	Sequence 3, Appli
35	20	100.0	20	7	US-10-679-710-45	Sequence 45, Appl
36	20	100.0	20	7	US-10-769-282-3	Sequence 3, Appli
37	20	100.0	20	7	US-10-769-282-45	Sequence 45, Appl
38	20	100.0	20	8	US-10-817-165-3	Sequence 3, Appli
39	20	100.0	20	8	US-10-817-165-45	Sequence 45, Appl
40	20	100.0	20	8	US-10-877-407-33	Sequence 33, Appl
41	20	100.0	20	8	US-10-877-369-36	Sequence 36, Appl
42	20	100.0	20	8	US-10-816-220-43	Sequence 43, Appl
43	20	100.0	20	8	US-10-831-778-777	Sequence 777, App
44	20	100.0	20	8	US-10-876-892-36	Sequence 36, Appl
45	20	100.0	20	8	US-10-876-965-36	Sequence 36, Appl

ALIGNMENTS

RESULT 1
US-09-824-468-49
; Sequence 49, Application US/09824468
; Patent No. US20020064515A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Weiner, George
; TITLE OF INVENTION: Methods and Products for Stimulating the
; TITLE OF INVENTION: Immune System Using Immunotherapeutic Oligonucleotides and
; TITLE OF INVENTION: Cytokines
; FILE REFERENCE: C1039/7026/HCL
; CURRENT APPLICATION NUMBER: US/09/824,468
; CURRENT FILING DATE: 2001-04-02
; PRIOR APPLICATION NUMBER: 09/286,098
; PRIOR FILING DATE: 1999-04-02
; NUMBER OF SEQ ID NOS: 105
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 49
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-824-468-49

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.8;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATAACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATAACGTTCCTGATGCT 20

RESULT 2
US-09-800-266A-43
; Sequence 43, Application US/09800266A
; Patent No. US20020156033A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids and
; TITLE OF INVENTION: Cancer Medicament Combination Therapy for the Treatment of
; TITLE OF INVENTION: Cancer
; FILE REFERENCE: C1037/7017(HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/800,266A

; CURRENT FILING DATE: 2001-03-05
; PRIOR APPLICATION NUMBER: US 60/187,214
; PRIOR FILING DATE: 2000-03-03
; NUMBER OF SEQ ID NOS: 146
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 43
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-800-266A-43

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.8;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATAACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATAACGTTCCTGATGCT 20

RESULT 3
US-09-895-007A-43
; Sequence 43, Application US/09895007A
; Patent No. US20020165178A1
; GENERAL INFORMATION:
; APPLICANT: Schetter, Christian
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACIDS FOR THE
; TITLE OF INVENTION: TREATMENT OF ANEMIA, THROMBOCYTOPENIA, AND NEUTROPENIA
; FILE REFERENCE: C1041/7014 (AWS)
; CURRENT APPLICATION NUMBER: US/09/895,007A
; CURRENT FILING DATE: 2001-06-28
; PRIOR APPLICATION NUMBER: US 60/214,368
; PRIOR FILING DATE: 2000-06-28
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 43
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-09-895-007A-43

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.8;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATAACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATAACGTTCCTGATGCT 20

RESULT 4
US-09-920-313-43
; Sequence 43, Application US/09920313
; Publication No. US20020198165A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; TITLE OF INVENTION: Nucleic Acids for the Prevention and
; TITLE OF INVENTION: Treatment of Gastric Ulcers
; FILE REFERENCE: C1037/7019 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/920,313
; CURRENT FILING DATE: 2001-08-01
; PRIOR APPLICATION NUMBER: US 60/222,248
; PRIOR FILING DATE: 2001-08-08
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 43
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-920-313-43

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.8;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATAACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATAACGTTCCTGATGCT 20

RESULT 5
US-09-888-326-545
; Sequence 545, Application US/09888326
; Publication No. US20030026801A1
; GENERAL INFORMATION:
; APPLICANT: Weiner, George
; APPLICANT: Hartmann, Gunther
; TITLE OF INVENTION: Methods for Enhancing Antibody-Induced
; TITLE OF INVENTION: Cell Lysis and Treating Cancer
; FILE REFERENCE: C1039/7052 (AWS)
; CURRENT APPLICATION NUMBER: US/09/888,326
; CURRENT FILING DATE: 2001-06-22
; PRIOR APPLICATION NUMBER: US 60/213,346
; PRIOR FILING DATE: 2000-06-22
; NUMBER OF SEQ ID NOS: 848
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 545
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
; NAME/KEY: misc_feature
; LOCATION: (0)...(0)
; OTHER INFORMATION: phosphodiester backbone
US-09-888-326-545

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.8;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATAACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATAACGTTCCTGATGCT 20

RESULT 6
US-09-818-918-3
; Sequence 3, Application US/09818918
; Publication No. US20030050261A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AWS)
; CURRENT APPLICATION NUMBER: US/09/818,918
; CURRENT FILING DATE: 2001-03-27
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSEQ for Windows Version 3.0

; SEQ ID NO 3
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-09-818-918-3

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.8;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATAACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATAACGTTCCTGATGCT 20

RESULT 7
US-09-818-918-45
; Sequence 45, Application US/09818918
; Publication No. US20030050261A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AWS)
; CURRENT APPLICATION NUMBER: US/09/818,918
; CURRENT FILING DATE: 2001-03-27
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 45
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-09-818-918-45

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.8;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATAACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATAACGTTCCTGATGCT 20

RESULT 8
US-09-931-583-42
; Sequence 42, Application US/09931583
; Publication No. US20030050263A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred
; TITLE OF INVENTION: Methods and Products for Treating HIV Infection
; FILE REFERENCE: C1039/7053(HCL)
; CURRENT APPLICATION NUMBER: US/09/931,583
; CURRENT FILING DATE: 2001-08-16
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 09/415,142
; PRIOR FILING DATE: 1999-10-09
; NUMBER OF SEQ ID NOS: 75
; SOFTWARE: PatentIn version 3.0

; SEQ ID NO 42
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: Synthetic Oligonucleotide
US-09-931-583-42

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.8;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATAACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATAACGTTCCTGATGCT 20

RESULT 9
US-09-776-479-777
; Sequence 777, Application US/09776479
; Publication No. US20030087848A1
; GENERAL INFORMATION:
; APPLICANT: Bratzler, Robert L.
; APPLICANT: Petersen, Deanna M.
; APPLICANT: Fouron, Yves
; TITLE OF INVENTION: Immunostimulatory Nucleic Acids for the
; TITLE OF INVENTION: Treatment of Asthma and Allergy
; FILE REFERENCE: C1037/7013 (HCL/MAT)
; CURRENT APPLICATION NUMBER: US/09/776,479
; CURRENT FILING DATE: 2001-02-02
; PRIOR APPLICATION NUMBER: US 60/179,991
; PRIOR FILING DATE: 2000-02-03
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 777
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-776-479-777

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.8;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATAACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATAACGTTCCTGATGCT 20

RESULT 10
US-09-954-987B-77
; Sequence 77, Application US/09954987B
; Publication No. US20030104523A1
; GENERAL INFORMATION:
; APPLICANT: Stefan Bauer
; APPLICANT: Grayson B. Lipford
; APPLICANT: Hermann Wagner
; TITLE OF INVENTION: PROCESS FOR HIGH THROUGHPUT SCREENING OF
; TITLE OF INVENTION: CpG-BASED IMMUNO-AGONIST/ANTAGONIST
; FILE REFERENCE: C1041/7016 (AWS)
; CURRENT APPLICATION NUMBER: US/09/954,987B
; CURRENT FILING DATE: 2001-09-17
; PRIOR APPLICATION NUMBER: US 60/233,035
; PRIOR FILING DATE: 2000-09-15
; PRIOR APPLICATION NUMBER: US 60/263,657
; PRIOR FILING DATE: 2001-01-23
; PRIOR APPLICATION NUMBER: US 60/291,726
; PRIOR FILING DATE: 2001-05-17
; PRIOR APPLICATION NUMBER: US 60/300,210
; PRIOR FILING DATE: 2001-06-22

; NUMBER OF SEQ ID NOS: 230
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 77
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-09-954-987B-77

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.8;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATAACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATAACGTTCCTGATGCT 20

RESULT 11
US-09-874-991C-44
; Sequence 44, Application US/09874991C
; Publication No. US20040052763A1
; GENERAL INFORMATION:
; APPLICANT: MOND, JAMES J.
; APPLICANT: FLORA, MICHAEL
; APPLICANT: KLINMAN, DENNIS M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY RNA/DNA HYBRID MOLECULES
; FILE REFERENCE: 07787.0042-0
; CURRENT APPLICATION NUMBER: US/09/874,991C
; CURRENT FILING DATE: 2001-06-07
; PRIOR APPLICATION NUMBER: 60/209,797
; PRIOR FILING DATE: 2000-06-07
; NUMBER OF SEQ ID NOS: 620
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 44
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic HDR
US-09-874-991C-44

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.8;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATAACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATAACGTTCCTGATGCT 20

RESULT 12
US-09-874-991C-110
; Sequence 110, Application US/09874991C
; Publication No. US20040052763A1
; GENERAL INFORMATION:
; APPLICANT: MOND, JAMES J.
; APPLICANT: FLORA, MICHAEL
; APPLICANT: KLINMAN, DENNIS M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY RNA/DNA HYBRID MOLECULES
; FILE REFERENCE: 07787.0042-0
; CURRENT APPLICATION NUMBER: US/09/874,991C
; CURRENT FILING DATE: 2001-06-07
; PRIOR APPLICATION NUMBER: 60/209,797
; PRIOR FILING DATE: 2000-06-07
; NUMBER OF SEQ ID NOS: 620
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 110
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic HDR
US-09-874-991C-110

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.8;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATAACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATAACGTTCCTGATGCT 20

RESULT 13
US-09-874-991C-133
; Sequence 133, Application US/09874991C
; Publication No. US20040052763A1
; GENERAL INFORMATION:
; APPLICANT: MOND, JAMES J.
; APPLICANT: FLORA, MICHAEL
; APPLICANT: KLINMAN, DENNIS M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY RNA/DNA HYBRID MOLECULES
; FILE REFERENCE: 07787.0042-0
; CURRENT APPLICATION NUMBER: US/09/874,991C
; CURRENT FILING DATE: 2001-06-07
; PRIOR APPLICATION NUMBER: 60/209,797
; PRIOR FILING DATE: 2000-06-07
; NUMBER OF SEQ ID NOS: 620
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 133
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic HDR
US-09-874-991C-133

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.8;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATAACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATAACGTTCCTGATGCT 20

RESULT 14
US-09-874-991C-161
; Sequence 161, Application US/09874991C
; Publication No. US20040052763A1
; GENERAL INFORMATION:
; APPLICANT: MOND, JAMES J.
; APPLICANT: FLORA, MICHAEL
; APPLICANT: KLINMAN, DENNIS M.
; TITLE OF INVENTION: IMMUNOSTIMULATORY RNA/DNA HYBRID MOLECULES
; FILE REFERENCE: 07787.0042-0
; CURRENT APPLICATION NUMBER: US/09/874,991C
; CURRENT FILING DATE: 2001-06-07
; PRIOR APPLICATION NUMBER: 60/209,797
; PRIOR FILING DATE: 2000-06-07
; NUMBER OF SEQ ID NOS: 620
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 161
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic HDR
US-09-874-991C-161

Query Match 100.0%; Score 20; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 2.8;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 TCCATAACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATAACGTTCCTGATGCT 20


RESULT 15
US-09-874-991C-182
; Sequence 182, Application US/09874991C
; Publication No. US20040052763A1
; GENERAL INFORMATION:
;  APPLICANT: MOND, JAMES J.
;  APPLICANT:  FLORA, MICHAEL
;  APPLICANT:  KLINMAN, DENNIS M.
;  TITLE OF INVENTION: IMMUNOSTIMULATORY RNA/DNA HYBRID MOLECULES
;  FILE REFERENCE: 07787.0042-0
;  CURRENT APPLICATION NUMBER: US/09/874,991C
;  CURRENT FILING DATE:  2001-06-07
;  PRIOR APPLICATION NUMBER: 60/209,797
;  PRIOR FILING DATE: 2000-06-07
;  NUMBER OF SEQ ID NOS: 620
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 182
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: Synthetic HDR
US-09-874-991C-182

  Query Match             100.0%;  Score 20;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 2.8;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATAACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATAACGTTCCTGATGCT 20


Search completed: April 17, 2006, 20:43:35
Job time : 366.5 secs
```

GenCore version 5.1.7

OM nucleic - nucleic search, using sw model

Run on: April 17, 2006, 17:33:01 ; Search time 425 Seconds
(without alignments)
189.545 Million cell updates/sec

Title: US-09-818-918-45
Perfect score: 20
Sequence: 1 tccataacgttcctgatgct 20

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 9281099 seqs, 2013915447 residues

Total number of hits satisfying chosen parameters: 18562198

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_NA_New:*
1: /SIDS5/ptodata/1/pubpna/US08_NEW_PUB.seq:*
2: /SIDS5/ptodata/1/pubpna/US06_NEW_PUB.seq:*
3: /SIDS5/ptodata/1/pubpna/US07_NEW_PUB.seq:*
4: /SIDS5/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
5: /SIDS5/ptodata/1/pubpna/US09_NEW_PUB.seq:*
6: /SIDS5/ptodata/1/pubpna/US09_NEW_PUB.seq1:*
7: /SIDS5/ptodata/1/pubpna/US10_NEW_PUB.seq:*
8: /SIDS5/ptodata/1/pubpna/US10_NEW_PUB.seq1:*
9: /SIDS5/ptodata/1/pubpna/US10_NEW_PUB.seq2:*
10: /SIDS5/ptodata/1/pubpna/US10_NEW_PUB.seq3:*
11: /SIDS5/ptodata/1/pubpna/US11_NEW_PUB.seq:*
12: /SIDS5/ptodata/1/pubpna/US11_NEW_PUB.seq2:*
13: /SIDS5/ptodata/1/pubpna/US11_NEW_PUB.seq3:*
14: /SIDS5/ptodata/1/pubpna/US11_NEW_PUB.seq4:*
15: /SIDS5/ptodata/1/pubpna/US60_NEW_PUB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	20	100.0	20	8	US-10-619-279-3	Sequence 3, Appli
2	20	100.0	20	8	US-10-435-656-3	Sequence 3, Appli
3	20	100.0	20	8	US-10-435-656-45	Sequence 45, Appl
4	20	100.0	20	10	US-10-382-822-3	Sequence 3, Appli
5	20	100.0	20	14	US-11-127-654-750	Sequence 750, App
6	20	100.0	20	14	US-11-134-918-3	Sequence 3, Appli
7	20	100.0	20	14	US-11-134-918-45	Sequence 45, Appl
8	20	100.0	20	14	US-11-031-460-3	Sequence 3, Appli
9	20	100.0	20	14	US-11-031-460-45	Sequence 45, Appl
10	20	100.0	20	14	US-11-067-587-3	Sequence 3, Appli
11	20	100.0	20	14	US-11-067-587-45	Sequence 45, Appl
12	20	100.0	20	14	US-11-099-683-65	Sequence 65, Appl
13	20	100.0	20	14	US-11-099-683-66	Sequence 66, Appl
14	19	95.0	20	8	US-10-497-591A-100	Sequence 100, App
15	18.4	92.0	20	8	US-10-497-591A-12	Sequence 12, Appl
16	18.4	92.0	20	8	US-10-469-561-9	Sequence 9, Appli
17	18.4	92.0	20	8	US-10-619-279-7	Sequence 7, Appli
18	18.4	92.0	20	8	US-10-435-656-7	Sequence 7, Appli
19	18.4	92.0	20	8	US-10-435-656-35	Sequence 35, Appl
20	18.4	92.0	20	8	US-10-435-656-44	Sequence 44, Appl
21	18.4	92.0	20	8	US-10-435-656-54	Sequence 54, Appl
22	18.4	92.0	20	10	US-10-382-822-7	Sequence 7, Appli
23	18.4	92.0	20	12	US-11-127-797-25	Sequence 25, Appl
24	18.4	92.0	20	12	US-11-127-803-25	Sequence 25, Appl
25	18.4	92.0	20	12	US-11-128-127-25	Sequence 25, Appl
26	18.4	92.0	20	14	US-11-025-858-2	Sequence 2, Appli
27	18.4	92.0	20	14	US-11-025-858-6	Sequence 6, Appli
28	18.4	92.0	20	14	US-11-127-654-10	Sequence 10, Appl
29	18.4	92.0	20	14	US-11-127-654-11	Sequence 11, Appl
30	18.4	92.0	20	14	US-11-127-654-731	Sequence 731, App
31	18.4	92.0	20	14	US-11-127-654-779	Sequence 779, App
32	18.4	92.0	20	14	US-11-127-654-836	Sequence 836, App
33	18.4	92.0	20	14	US-11-134-918-7	Sequence 7, Appli
34	18.4	92.0	20	14	US-11-134-918-35	Sequence 35, Appl
35	18.4	92.0	20	14	US-11-134-918-44	Sequence 44, Appl
36	18.4	92.0	20	14	US-11-134-918-54	Sequence 54, Appl
37	18.4	92.0	20	14	US-11-031-460-7	Sequence 7, Appli
38	18.4	92.0	20	14	US-11-031-460-35	Sequence 35, Appl
39	18.4	92.0	20	14	US-11-031-460-44	Sequence 44, Appl
40	18.4	92.0	20	14	US-11-031-460-54	Sequence 54, Appl
41	18.4	92.0	20	14	US-11-067-587-7	Sequence 7, Appli
42	18.4	92.0	20	14	US-11-067-587-35	Sequence 35, Appl
43	18.4	92.0	20	14	US-11-067-587-44	Sequence 44, Appl
44	18.4	92.0	20	14	US-11-067-587-54	Sequence 54, Appl
45	18.4	92.0	20	14	US-11-099-683-75	Sequence 75, Appl

ALIGNMENTS

RESULT 1
US-10-619-279-3
; Sequence 3, Application US/10619279
; Publication No. US20050267057A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7023/HCL
; CURRENT APPLICATION NUMBER: US/10/619,279
; CURRENT FILING DATE: 2003-07-14
; PRIOR APPLICATION NUMBER: US 08/960,774
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 123
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-619-279-3

Query Match 100.0%; Score 20; DB 8; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.44;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATAACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATAACGTTCCTGATGCT 20

RESULT 2
US-10-435-656-3
; Sequence 3, Application US/10435656
; Publication No. US20050277604A1

; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AWS)
; CURRENT APPLICATION NUMBER: US/10/435,656
; CURRENT FILING DATE: 2003-05-09
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-10-435-656-3

Query Match 100.0%; Score 20; DB 8; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.44;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATAACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATAACGTTCCTGATGCT 20

RESULT 3
US-10-435-656-45
; Sequence 45, Application US/10435656
; Publication No. US20050277604A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Kline, Joel N.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
; FILE REFERENCE: C1039/7048 (AWS)
; CURRENT APPLICATION NUMBER: US/10/435,656
; CURRENT FILING DATE: 2003-05-09
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; NUMBER OF SEQ ID NOS: 56
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 45
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-10-435-656-45

Query Match 100.0%; Score 20; DB 8; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.44;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATAACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATAACGTTCCTGATGCT 20

RESULT 4
US-10-382-822-3
; Sequence 3, Application US/10382822
; Publication No. US20060058251A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Klinman, Dennis
; APPLICANT: Steinberg, Alfred D.
; TITLE OF INVENTION: Methods for Treating and Preventing
; TITLE OF INVENTION: Infectious Disease
; FILE REFERENCE: C01039.70062.US
; CURRENT APPLICATION NUMBER: US/10/382,822
; CURRENT FILING DATE: 2003-03-06
; PRIOR APPLICATION NUMBER: US 09/630,319
; PRIOR FILING DATE: 2000-07-31
; PRIOR APPLICATION NUMBER: US 08/960,774
; PRIOR FILING DATE: 1997-10-30
; PRIOR APPLICATION NUMBER: US 08/738,652
; PRIOR FILING DATE: 1996-10-30
; PRIOR APPLICATION NUMBER: US 08/386,063
; PRIOR FILING DATE: 1995-02-07
; PRIOR APPLICATION NUMBER: US 08/276,358
; PRIOR FILING DATE: 1994-07-15
; NUMBER OF SEQ ID NOS: 124
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Oligonucleotide
US-10-382-822-3

Query Match 100.0%; Score 20; DB 10; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.44;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATAACGTTCCTGATGCT 20
||||||||||||||||||||
Db 1 TCCATAACGTTCCTGATGCT 20

RESULT 5
US-11-127-654-750
; Sequence 750, Application US/11127654
; Publication No. US20050250726A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Arthur M.
; APPLICANT: Berg, Daniel J.
; TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACID FOR TREATMENT OF NON-ALLERGIC
; TITLE OF INVENTION: INFLAMMATORY DISEASES
; FILE REFERENCE: C1039.70060US01
; CURRENT APPLICATION NUMBER: US/11/127,654
; CURRENT FILING DATE: 2005-05-12
; PRIOR APPLICATION NUMBER: US 10/112,653
; PRIOR FILING DATE: 2002-03-29
; PRIOR APPLICATION NUMBER: US 60/279,642
; PRIOR FILING DATE: 2001-03-29
; NUMBER OF SEQ ID NOS: 1040
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 750
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-127-654-750

Query Match 100.0%; Score 20; DB 14; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.44;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TCCATAACGTTCCTGATGCT 20
||||||||||||||||||||

```
Db          1 TCCATAACGTTCCTGATGCT 20


RESULT 6
US-11-134-918-3
; Sequence 3, Application US/11134918
; Publication No. US20050267064A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Kline, Joel N.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7048 (AWS)
;  CURRENT APPLICATION NUMBER: US/11/134,918
;  CURRENT FILING DATE:  2005-05-23
;  PRIOR APPLICATION NUMBER: US/09/818,918
;  PRIOR FILING DATE: 2001-03-27
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  NUMBER OF SEQ ID NOS: 56
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 3
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-11-134-918-3

  Query Match             100.0%;  Score 20;  DB 14;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 0.44;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATAACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATAACGTTCCTGATGCT 20


RESULT 7
US-11-134-918-45
; Sequence 45, Application US/11134918
; Publication No. US20050267064A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Kline, Joel N.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7048 (AWS)
;  CURRENT APPLICATION NUMBER: US/11/134,918
;  CURRENT FILING DATE:  2005-05-23
;  PRIOR APPLICATION NUMBER: US/09/818,918
;  PRIOR FILING DATE: 2001-03-27
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  NUMBER OF SEQ ID NOS: 56
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 45
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-11-134-918-45

  Query Match             100.0%;  Score 20;  DB 14;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 0.44;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATAACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATAACGTTCCTGATGCT 20


RESULT 8
US-11-031-460-3
; Sequence 3, Application US/11031460
; Publication No. US20050277609A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Kline, Joel N.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7048 (AWS)
;  CURRENT APPLICATION NUMBER: US/11/031,460
;  CURRENT FILING DATE:  2005-01-07
;  PRIOR APPLICATION NUMBER: US/09/818,918
;  PRIOR FILING DATE: 2001-03-27
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  NUMBER OF SEQ ID NOS: 56
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 3
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-11-031-460-3

  Query Match             100.0%;  Score 20;  DB 14;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 0.44;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATAACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATAACGTTCCTGATGCT 20


RESULT 9
US-11-031-460-45
; Sequence 45, Application US/11031460
; Publication No. US20050277609A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Kline, Joel N.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7048 (AWS)
;  CURRENT APPLICATION NUMBER: US/11/031,460
;  CURRENT FILING DATE:  2005-01-07
;  PRIOR APPLICATION NUMBER: US/09/818,918
;  PRIOR FILING DATE: 2001-03-27
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  NUMBER OF SEQ ID NOS: 56
;  SOFTWARE: FastSEQ for Windows Version 3.0
```

```
; SEQ ID NO 45
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-11-031-460-45

  Query Match             100.0%;  Score 20;  DB 14;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 0.44;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATAACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATAACGTTCCTGATGCT 20


RESULT 10
US-11-067-587-3
; Sequence 3, Application US/11067587
; Publication No. US20060003955A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Kline, Joel N.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7048 (AWS)
;  CURRENT APPLICATION NUMBER: US/11/067,587
;  CURRENT FILING DATE:  2005-02-25
;  PRIOR APPLICATION NUMBER: US/09/818,918
;  PRIOR FILING DATE: 2001-03-27
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  NUMBER OF SEQ ID NOS: 56
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 3
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-11-067-587-3

  Query Match             100.0%;  Score 20;  DB 14;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 0.44;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATAACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATAACGTTCCTGATGCT 20


RESULT 11
US-11-067-587-45
; Sequence 45, Application US/11067587
; Publication No. US20060003955A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur M.
;  APPLICANT:  Kline, Joel N.
;  APPLICANT:  Klinman, Dennis
;  APPLICANT:  Steinberg, Alfred D.
;  TITLE OF INVENTION: Immunostimulatory Nucleic Acid Molecules
;  FILE REFERENCE: C1039/7048 (AWS)
;  CURRENT APPLICATION NUMBER: US/11/067,587
;  CURRENT FILING DATE:  2005-02-25
;  PRIOR APPLICATION NUMBER: US/09/818,918
;  PRIOR FILING DATE: 2001-03-27
;  PRIOR APPLICATION NUMBER: US 08/276,358
;  PRIOR FILING DATE: 1994-07-15
;  PRIOR APPLICATION NUMBER: US 08/386,063
;  PRIOR FILING DATE: 1995-02-07
;  PRIOR APPLICATION NUMBER: US 08/738,652
;  PRIOR FILING DATE: 1996-10-30
;  NUMBER OF SEQ ID NOS: 56
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 45
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-11-067-587-45

  Query Match             100.0%;  Score 20;  DB 14;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 0.44;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATAACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATAACGTTCCTGATGCT 20


RESULT 12
US-11-099-683-65
; Sequence 65, Application US/11099683
; Publication No. US20060019916A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur
;  APPLICANT:  Vollmer, Jorg
;  TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACIDS FOR INDUCING IL-10 RESPONSES
;  FILE REFERENCE: C1037.70047US01
;  CURRENT APPLICATION NUMBER: US/11/099,683
;  CURRENT FILING DATE:  2005-04-04
;  PRIOR APPLICATION NUMBER: US 60/558,951
;  PRIOR FILING DATE: 2004-04-02
;  NUMBER OF SEQ ID NOS: 143
;  SOFTWARE: PatentIn version 3.3
; SEQ ID NO 65
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic oligonucleotide
US-11-099-683-65

  Query Match             100.0%;  Score 20;  DB 14;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 0.44;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 TCCATAACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATAACGTTCCTGATGCT 20


RESULT 13
US-11-099-683-66
; Sequence 66, Application US/11099683
; Publication No. US20060019916A1
; GENERAL INFORMATION:
;  APPLICANT: Krieg, Arthur
;  APPLICANT:  Vollmer, Jorg
;  TITLE OF INVENTION: IMMUNOSTIMULATORY NUCLEIC ACIDS FOR INDUCING IL-10 RESPONSES
;  FILE REFERENCE: C1037.70047US01
;  CURRENT APPLICATION NUMBER: US/11/099,683
;  CURRENT FILING DATE:  2005-04-04
;  PRIOR APPLICATION NUMBER: US 60/558,951
;  PRIOR FILING DATE: 2004-04-02
;  NUMBER OF SEQ ID NOS: 143
;  SOFTWARE: PatentIn version 3.3
; SEQ ID NO 66
;   LENGTH: 20
```

; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
US-11-099-683-66

Query Match 100.0%; Score 20; DB 14; Length 20;
Best Local Similarity 100.0%; Pred. No. 0.44;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 TCCATAACGTTCCTGATGCT 20
              ||||||||||||||||||||
Db          1 TCCATAACGTTCCTGATGCT 20
```

RESULT 14
US-10-497-591A-100
; Sequence 100, Application US/10497591A
; Publication No. US20050250716A1
; GENERAL INFORMATION:
; APPLICANT: SCHMIDT, WALTER
; APPLICANT: SCHELLACK, CAROLA
; APPLICANT: EGYED, ALENA
; APPLICANT: LINGNAU, KAREN
; TITLE OF INVENTION: IMMUNOSTIMULATORY OLIGODEOXYNUCLEOTIDES
; FILE REFERENCE: SONN:045US
; CURRENT APPLICATION NUMBER: US/10/497,591A
; CURRENT FILING DATE: 2004-06-03
; PRIOR APPLICATION NUMBER: PCT/EP02/13791
; PRIOR FILING DATE: 2002-12-05
; PRIOR APPLICATION NUMBER: A 1924/2001
; PRIOR FILING DATE: 2001-12-07
; NUMBER OF SEQ ID NOS: 113
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 100
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; OTHER INFORMATION: Primer
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (9)
; OTHER INFORMATION: n = inosine or uracil
US-10-497-591A-100

Query Match 95.0%; Score 19; DB 8; Length 20;
Best Local Similarity 95.0%; Pred. No. 1.6;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```
Qy          1 TCCATAACGTTCCTGATGCT 20
              |||||||| ||||||||||
Db          1 TCCATAACNTTCCTGATGCT 20
```

RESULT 15
US-10-497-591A-12
; Sequence 12, Application US/10497591A
; Publication No. US20050250716A1
; GENERAL INFORMATION:
; APPLICANT: SCHMIDT, WALTER
; APPLICANT: SCHELLACK, CAROLA
; APPLICANT: EGYED, ALENA
; APPLICANT: LINGNAU, KAREN
; TITLE OF INVENTION: IMMUNOSTIMULATORY OLIGODEOXYNUCLEOTIDES
; FILE REFERENCE: SONN:045US
; CURRENT APPLICATION NUMBER: US/10/497,591A
; CURRENT FILING DATE: 2004-06-03
; PRIOR APPLICATION NUMBER: PCT/EP02/13791
; PRIOR FILING DATE: 2002-12-05
; PRIOR APPLICATION NUMBER: A 1924/2001
; PRIOR FILING DATE: 2001-12-07
; NUMBER OF SEQ ID NOS: 113
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 12
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; OTHER INFORMATION: Primer
US-10-497-591A-12

Query Match 92.0%; Score 18.4; DB 8; Length 20;
Best Local Similarity 95.0%; Pred. No. 3.3;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```
Qy          1 TCCATAACGTTCCTGATGCT 20
              ||||| |||||||||||||||
Db          1 TCCATGACGTTCCTGATGCT 20
```

Search completed: April 17, 2006, 18:51:10
Job time : 426.125 secs